# The Mining Journal,

## RAILWAY AND COMMERCIAL GAZETTE:

FORMING A COMPLETE RECORD OF THE PROCEEDINGS OF ALL PUBLIC COMPANIES.

No. 1001—Vol. XXIV.] LONDON, SATURDAY, OCTOBER 28, 1854. [Price 6d.


R. JAMES CROFTS, MINING BROKER, No. 1, FINCH LANE, CORNHILL, LONDON. . CROFTS TRANSACTS BUSINESS, both in BUYING and SELLING, for immeash. Dividend Mines, well selected, are the best of any known investments—paying 15 to 20 per cent. per annum. e market continuing depressed, presents a most favourable moment for making hases in every description of sound mining property. . CROFTS transacts every description of business connected with the Stock Exge at the same rates of commission as charged by the brokers of that establishment. Bankers—The Commercial Bank of London. ted Oct. 27, 1854. 1

R. JAMES LANE, No. 33, THREADNEEDLE STREET, LONDON, continues to DEAL in all the LEADING MINES, and is desirous RCHASING Sortridge Consols, Hingston Down, Devon Great Consols, Bedford d, Molland, &c. 2

R. BRENCHLEY, No. 2, PINNER'S COURT, OLD BROAD STREET, TRANSACTS BUSINESS, both in BUYING and SELLING, at F PRICES, in MINING, RAILWAY, INSURANCE SHARES, &c., for immecash. Amongst others, in the following DIVIDEND MINES:—

| | | | |
|---|---|---|---|
| d Consols | South Tamar | Wheal Buller | South Caradon |
| rd United | Trehane Trewetha | Wheal Basset | Wheal Arthur |

PROGRESSIVE MINES, now claiming more immediate attention:— 3

| | | | |
|---|---|---|---|
| nd Lanarth | Great Alfred | North Hingston | Tassan |
| Darren | North Robert | St. Anbys and Grylls | Wheal Trefusis |
| yner | Hingston Down | Sortridge Cons. East | Wheal Edward |
| ail | North Crofty | South Crofty | Wheal Russell |
| mena Gerreg | North Basset | Tavy Consols | West Sortridge |

ry information afforded, either by letter or upon personal application.

R. PETER WATSON begs to inform his Friends, that he has REMOVED from London to CAMBORNE, CORNWALL. 4

R. W. LEMON OLIVER, STOCK AND SHAREBROKER, 23, THREADNEEDLE STREET Business transacted in every description of British and Foreign Mines. orn Broker.) 6

SEPH MUMFORD (late B. Mumford and Son) is in a POSITION to BUY and SELL SHARES at close market prices in all *bona fide* BRITISH S.—N.B. First-class mines pay from 12½ to 15 per cent. es, 31, Great St. Helen's. 6

GLISH AND FOREIGN STOCK, SHARE, AND MINING OFFICES, No. 3, OLD BROAD STREET, LONDON. HENRY SIBLEY (late Mr. Peter Watson) will at all times give the best inion; and also BUY and SELL SHARES on the usual commission. 7

ENERAL MINE AGENCY OFFICES, 3, NAG'S HEAD COURT, GRACECHURCH STREET. . PIERRE FOLEY, C. and M.E., Assisted by eminent Mining Engineers. Private address, 19, Gibson-square, Islington, London. 8

ESSRS. POWELL AND COOKE, MINING AGENTS, 1, CROWN COURT, THREADNEEDLE STREET, LONDON. 9

R. R. GOMPERS, MINING SHARE DEALER, 98, GRACECHURCH STREET, LONDON. 10

MES F. BODDY, 48, THREADNEEDLE STREET, LONDON, egs to inform the public, he is in a position to DEAL in any of the leading ND and PROGRESSIVE MINES quoted in the List of the *Mining Journal*. 8, 1854. 11

ILDBERG MINES.—A FEW SHARES in these most valuable and promising MINES FOR SALE. (See last report in *Mining Journal*.) nformation forwarded on application to JAMES F. BODDY, 48, Threadneedle-London. 12

. JOSEPH WM. OLIVER, No. 75, OLD BROAD STREET, LONDON, particularly RECOMMENDS PURCHASES in the following , at their present LOW PRICES:—

| | | | |
|---|---|---|---|
| e & Bedford | East Russell | Alfred Consols | North Trelawny |
| Consols | West Phœnix | Great Wheal Alfred | Wheal Gill |
| rtridge | Great Sheba | West Alfred | Ludcott |
| Day | West Providence | East Tamar | Marrjann |
| y(St.Agnes) | North Robert | South Tamar | Trelawny |
| heal Hugo | Wheal Zion | South Bog | South Towy |
| United | Beringdon Consols | Linares | Tehidy |
| Maria | Great Wh. Baddern | Mary Great Consols | Kenneggy |
| Down | Hennock | Wheal Wrey | South Caradon |
| ngston | Exmouth and Adams | Trewetha | West Caradon |

Lively will BUY or SELL any shares or securities for the usual commission. ED.—East Wheal Bedford, Sortridge Consols, West Sortridge, North Sorrest Wheal Hugo, North Robert, North Hingston, Wheal Zion. 13

ING SHARES.—Mr. GEORGE SPRATLEY has for SALE at uch LOWER PRICES than hitherto quoted:— 14

| | | | |
|---|---|---|---|
| l Buller | 50 Tamar Maria | 100 Unity Fire, 6s. | 20 Trewetha, £3¾. |
| Basset | 5 Alf. Cons., £19. | 100 Poltimore | 5 North Robert |
| Sortridge | 40 South Cork | 20 East Tamar | 10 East Russell |
| dge Cons. | 5 West Providence | 30 Welsh Potosi, £2 paid | 50 North Hingston |
| Darren | 50 Wheal Kitty | | |

PECIAL SALE.—220 Tamar Maria, 100 West Sortridge, and 50 Hennock. ED.—South Devon, East Russell, Poltimore, Nant-ar-Nelle, and Carnyorth. hester-buildings, London.

HY, GOULD SHARP HAS SHARES FOR SALE IN—

| | | |
|---|---|---|
| ortridge Consols. | West Sortridge. | Tamar Maria. |
| ngston. | Wheal Zion. | Trenow Consols. |
| l Prosper, 9d. | 20 Dalrhiw, £3¾. | 100 North Sortridge, 3s. 6d. |

all instructions forwarded for the disposal of shares, the number should be ce required, and time allowed for disposal of same. Hall Chambers, Bishopsgate-street, London. 15

LACK TIN AND COPPER MINES.—Mr. W. CHARLES SHARES FOR SALE in the above important MINES, which are now per share every two months. W. CHARLES has SHARES FOR SALE also owing:—viz., Great Crinnis, West Par Consols, East Carsdon, Caylan, anford and Baring, Albion Clay, Wrygan Slate, North Trelawny, and r. W. CHARLES is a BUYER in West Crinnis, Marke Valley, Union Tin, —37, Austinfriars, Oct. 27, 1854. 16

RS. KENWORTHY AND CO., 37, OLD BROAD STREET, ntinue to TRANSACT BUSINESS in BRITISH and FOREIGN MINES, , DOCK, CANAL, and OTHER SHARES, CONSOLS, and GOVERNCURITIES GENERALLY, the present fluctuations therein offering a wide dicious speculation. KENWORTHY and Co. would direct special attention to the prostrate state ing market, and, in anticipation of an early reaction, would advise the purchase of several promising adventures, now at a considerable discount, of which will be furnished on application.—Oct., 1854. 17

CAREY, MINING AGENT, TRANSACTS BUSINESS in ITISH and FOREIGN MINES, in INSURANCE, BANKING, and RAILARES, at the closest prices of the day. 18

AY has FOR SALE SHARES in DIVIDEND-PAYING MINES, which, present low prices, will pay from 20 to 30 per cent. And SHARES in good SING MINES, with their machinery complete, and raising ores:—Hing, North Downs, St. Day United, East Caradon, Caylan, Tamar, Sortridge w Bay, Molland, Comtismartin, East Wheal Vor, Dalcoarrlia, &c. nte-street, City, Oct. 27, 1854. 19

NG INVESTMENT.—T. FULLER AND CO., 51, THREADDLE-STREET, LONDON, beg to call attention to the favourable op INVESTING in BRITISH MINES, particularly in those dividing their two or three months, which average from 15 to 20 per cent., with every continuance, and being free from fluctuation, such as Consols, railway, urities; and respectfully direct attention to the PURCHASE of SHARES OGRESSIVE MINES, being in full operation, with efficient machinery, evelopement and bringing the same into a profitable state of working, ent prices, cannot fail to remunerate all who invest; a careful selection can be obtained by a daily communication with agents of high scientific experience of the principal mines in Devon, Cornwall, and Wales. and Co. will furnish every information to capitalists, either personally d can effect purchases or sales of every description. 20

ARLES GURNEY, No. 4, CORBET COURT, GRACECH STREET, LONDON, will be happy to PURCHASE or SELL ll DIVIDEND MINES, now paying from 15 to 20 per cent.; or in those prospects of early dividends. gs Consols, 250 Wheal Prosper (2s. 6d), Tamar Maria, West Sortridge, Arthur (5s.), 100 West Wheal Friendship (5s.), North Hingston. 20

MINING PROPERTY.—Mr. HERRON has SHARES in the best DIVIDEND-PAYING MINES FOR SALE, and which will give the purchaser 15 to 20 per cent. for the outlay. Amongst others are the following:—

| | | | |
|---|---|---|---|
| Alfred Consols | West Caradon | Bedford United | Linares |
| Trelawny | North Poel | Wheal Arthur | Alten |
| Trehane | Courtarrow | St. John del Rey | Imperial Brazilian |
| South Basset | South Tamar | Cobre | Hingston Down |
| South Frances | Great Devon Consols | Copiapo | |

And has also FOR SALE SHARES in NON-DIVIDEND PAYING MINES, which are worth attention at the present reduced market prices, such as—

| | | | |
|---|---|---|---|
| East Wheal Rose | Bryntall | Vale of Towy | North Wh. Robert |
| Gilmar | North Downs | North Towy | Tamar Consols |
| Great Alfred Consols | Gonamena | Wheal Cupid | St. Day United |
| West Alfred Consols | Craddock Moor | Thomas United | East Basset |
| | Grambler | Cwm Darren | |

Mining Offices, 33, Clement's-lane, Lombard-street. 21

MR. JOSEPH JAMES REYNOLDS, STOCK AND SHAREBROKER, No. 21, THREADNEEDLE STREET, LONDON, begs to return his sincere thanks to his friends and the public, for the kind and liberal support he has received from all parts of the kingdom during the period he has been in business as a Broker of the City of London. 22

Mr. REYNOLDS continues to TRANSACT BUSINESS in BRITISH and FOREIGN STOCKS, FUNDS, and SECURITIES, BRITISH and FOREIGN RAILWAY SHARES, DEBENTURES, &c.; also, in ENGLISH, IRISH, SCOTCH, and FOREIGN MINING SHARES. And is at all times in a position to FURNISH to the public the most AUTHENTIC and ACCURATE INFORMATION for the guidance of capitalists desirous of PURCHASING or SELLING stock, funds, securities, or shares, which he will effect on the best possible terms for the usual commission.

The present depressed state of the market, both for dividend-paying as well as progressive mining shares, in Mr. REYNOLDS's opinion, presents a fair opportunity for investment in sound mining property.

Mines inspected by agents of experience and high respectability in any part of the United Kingdom within the shortest notice.

CAPT. THOMAS DUNN, of TAVISTOCK, undertakes to INSPECT, REPORT, and SURVEY any MINES or MINERAL PROPERTY in ENGLAND, IRELAND, SCOTLAND, or WALES. No objection to take the management of any mine or mines in the neighbourhood of Tavistock. 23

COLONIAL INVESTMENTS.—The undersigned, having for many years devoted his particular attention to the rise and progress of the various Joint-Stock Associations connected with the colonies, at home and abroad, and receiving regularly their reports and full details of their proceedings, besides possessing many valuable and exclusive sources of information, through his extensive foreign correspondence, is enabled to FURNISH IMPARTIAL and TRUSTWORTHY INFORMATION, as to the position and prospects of ALL COMPANIES, to those who may be interested as shareholders, or are seeking profitable channels of investment.
P. L. SIMMONDS, 5, Barge-yard, London. 24

COBALT AND NICKEL.—ALFRED SENIOR MERRY, REFINER AND PURCHASER OF COBALT AND NICKEL ORES, AND ASSAYER IN GENERAL.—Address, LEE CRESCENT, BIRMINGHAM. 25

NICKEL AND COBALT REFINING, AND GERMAN SILVER WORKS, MILL STREET, BROAD STREET, BIRMINGHAM.—STEPHEN BARKER begs to inform the Trade that he has the following articles for sale:— 26

| | |
|---|---|
| REFINED METALLIC NICKEL. | OXIDE OF COBALT. |
| REFINED METALLIC BISMUTH. | GERMAN SILVER—IN INGOTS, SHEET [WIRE, &c |

NICKEL AND COBALT ORES PURCHASED.

IBBOTSON BROTHERS AND CO., SHEFFIELD, STEEL AND FILE WORKS; also COMMISSION MERCHANTS for the SALE and PURCHASE of every description of MACHINES and MACHINERY, and every article used by engineers, too numerous to enumerate in an advertisement. 27

MR. THOMAS EDINGTON (late of the Phœnix Ironworks, Glasgow), IRON MERCHANT, CONTRACTOR, INSPECTOR of RAILWAY BARS and CASTINGS, AGENT for PATENTS, GENERAL COMMISSION AGENT. WANTED.—AGENCIES for the SALE ON COMMISSION of ENGLISH BOILER and SHIP PLATES, ANGLE and RIVET IRON, TINNED PLATES, &c. 17, Gordon-street, Glasgow. 28

JOHN HARRISON, No. 32, CASTLE STREET, LIVERPOOL, GENERAL BROKER AND MINE MANAGER, begs to submit to capitalists and others the following valuable SHARES at the prices affixed, for an immediate answer. Terms, nett cash:—

| | | | | |
|---|---|---|---|---|
| 65 Shares in Great Onslow Consols | £0 17 6; | constitution 17,043; | paid £1 17 6 | |
| 40 Shares in Penquean Slate Quarries | 0 16 0; | constitution 7,484; | paid 2 10 0 | |
| 75 Shares in Perran Consols | 0 12 6; | constitution 9,259; | paid 2 0 0 | |
| 50 Shares in Mount's Bay | 1 2 6; | constitution 7,679; | paid 2 10 0 | |
| 10 Shares in Ludcott | 1 0 0. | | | |
| 2 Shares in Gonamena | 11 0 0. | | | |
| 40 Shares in South Crenver | 1 0 0. | | | |
| 20 Shares in North Hingston | 0 6 6. | | | |

No reserved stock, by the managers, in the first four adventures. 29

MR. TYACK, MINE BROKER, CAMBORNE, from his situation in the best mining district in the county, together with his daily opportunities of increased experience, is well adapted to GIVE ADVICE to CAPITALISTS disposed to invest in MINING; considering the present time, a good and favourable opportunity to invest. Mines inspected by the most experienced agents. 30

MESSRS. HENWOOD AND CO., MINE AGENTS AND SURVEYORS, LEEDS, OFFER THEIR SERVICES to parties embarking in MINING, and are prepared to give advice on all the leading speculations of the day. Offices of the Pencorse Consols, Copper, Zinc, and Lead Mining Company, &c. Telegraph-yard, Leeds. 31

MR. MICHAEL WILLIAMS BAWDEN, MINE SHARE BROKER AND GENERAL ASSAY MASTER, LISKEARD. 32

MR. RICHARD HAWKE, MINE SHAREBROKER, LISKEARD, CORNWALL. 33

MR. FRANCIS RIDGMAN, MINE SHAREBROKER, TAVISTOCK, DEVON. 34

MR. W. H. BRUMBY, STOCK AND SHAREBROKER, 1, BRIDGE STREET, BATH. 35

MR. NEWTON SAMUELSON, ASSAYER AND ANALYTICAL CHEMIST,—3, HACKIN'S HEY, LIVERPOOL. 36

MR. W. T. RICKARD, F.C.S., ANALYTICAL CHEMIST, Assayer of Copper and the Precious Metals, by Special Appointment of the Chilian Government, ACORN VILLA, FORD ROAD, OLD FORD, LONDON. 37

SHARES WANTED,—In Wheal Wrey, North Crofty, North Trelawny, and Treloweth.—Please state lowest price and number to Mr. Orford, 53, Wigmore-street, Cavendish-square, London. 38

TEHIDY.—A LOT OF SHARES TO BE SOLD in this MINE, at 20s. each, all calls paid.—Apply, by letter, "Y. W.," Post-office, Throgmorton-street. 39

FOR SALE,—120 Cordillera, 4s.; 20 British Australian, 3s.; 20 Lake Bathurst, 2s.; 20 Quintrell Downs, 10s.; 20 Combmartin; 90 N. S. Wales Coal, &c., 15s.; 30 Wheal Marshall, 15s.; 185 Molland, 6s.; 50 Tremollett Down, 7s. 6d.; 320 Perran Silver-lead, 2s. 6d.; 20 Cwm Eigui, 4s.
Address, "Beta," 3, Sunny Bank, Leeds. 40

SHARES FOR SALE.— 41

RAILWAY SHARES.

| No. of shares. | Name of company. | Paid per share. | Price per sh. |
|---|---|---|---|
| 25 | Londonderry and Coleraine | £25 0 0 | ..... |
| 25 | Londonderry and Coleraine (Preference) | 12 10 0 | ..... |
| 10 | East Anglian (5 per cent. Preference) | 10 0 0 | ..... |
| | MINING SHARES. | | |
| 30 | Arundell United Copper | £1 7 6 | £1 7 6 |
| 50 | Altgoed Slate and Slab Quarry (dividend-paying) | 2 0 0 | 1 7 6 |
| 5 | Great Cowarch | 4 2 6 | 2 5 0 |
| 50 | Great Cambrian Mining and Quarrying | 1 0 0 | 1 0 0 |
| 100 | South Australian Copper | 1 0 0 | 1 0 0 |
| 50 | South Bog | 0 14 6 | 0 11 9 |
| 50 | Tassan Lead | 0 13 0 | 0 8 0 |
| | SUNDRIES. | | |
| 20 | Prudential Mutual Insurance (5 per cent.) | £1 0 0 | £0 15 0 |
| 50 | Claussen's Flax (French) | 20 0 0 | 6 0 0 |

A Westminster Improvement Bond, at a discount of 50 per cent.
Apply, by letter, to "T. J.," 13, St. John's-street, St. Peter's-street, Islington.

GEORGE MOORE HAS FOR SALE, OR ANY PART:—

| | | |
|---|---|---|
| 50 Cas Gynoc, 11s. 9d. | 20 Great Badden, £2½. | 10 Sortridge, £4½. |
| 50 Cwm Darren, 8s. 6d. | 100 Kilraine, 6s. 9d. | 20 West Jane, 17s. 6d. |
| 20 East Wh. Vor, £1 1s. | 40 Molland, 3s. 6d. | 50 West Sortridge, 10s. 3d. |
| 20 East Wh. Russell, £2¾. | 3 North Basset, £19¾. | 50 Wheal Robert, 12s. 6d. |
| 30 Great Cosgarth, £1 16s. | 50 North Hingston, 6s. 9d. | 20 Wheal Russell, £1. |
| 3 Great Alfred, £24½. | 3 North Robert, £30. | 5 Wheal Uny, £9½. |
| | 50 Red Dragon, £¾. | |

32, Nicholas-lane, Lombard-street. 42

MR. EVAN HOPKINS, C.E., CONSULTING MINING ENGINEER.—Mr. HOPKINS may be CONSULTED DAILY by gentlemen and capitalists—who have invested, or may wish to invest their capital in MINES or MINERAL PROPERTIES—on all matters connected therewith—home and foreign. Also, in every description of METALS, MINERALS, ROCKS and their commercial value—NEW PATENTS, &c., so as to make a judicious selection and avoid questionable schemes. 43

Mr. HOPKINS requests his ANNUAL CLIENTS to SEND him their PRESENT ADDRESS, and a list of the shares, &c., they now hold.

Mr. HOPKINS is now prepared to receive prospectuses and reports on new undertakings, to give his opinion thereon, and to take an interest and an active part in the London management of any of the legitimate speculations he may recommend to his clients.—38, Thurloe-square, Brompton.

TO CORNISH MINE CAPTAINS.—WANTED, THREE or FOUR COPPER MINING SETTS, of good promise, and situate in localities having the analogy of surrounding profitable mines in their favour. £50 bonus will be given, and the expenses of deeds. The management can be retained, if eligible for the situation.—Address, Mr. TREDINNICK, 4, Austinfriars, London. 44

TO MINE ADVENTURERS.—A PRACTICAL MINER, of considerable experience, residing in Cornwall, who has been accustomed to travel, and to the management and surveying of mines, assaying of silver ores, and is familiar with the Spanish language, begs to OFFER HIMSELF to INSPECT, REPORT UPON, and SURVEY, any MINES or MINING PROPERTY, either in England or elsewhere,—Apply to "Inspector," *Mining Journal* office, No. 26, Fleet-street, London. 45

A MINING ENGINEER, who has been recommended to reside in Spain, Italy, or the South of France, would be glad to UNDERTAKE REPORTING on MINES or MINING PROJECTS, or any other more PERMANENT INSPECTION of WORKING MINES, in that part of Europe, for any interested English capitalists.—For further particulars and address, apply to "M. E.," *Mining Journal* office, 26, Fleet-street, London. 46

WANTED, a SITUATION as MINE AGENT, by a person who can produce first-class testimonials, and has had ample experience in managing, surveying, and planning mines.—Apply, "M. H.," Post-office, Alston, Cumberland. 47

WANTED, a MINE AGENT, to proceed at once to TAKE CHARGE of LEAD MINES in SPAIN. He must thoroughly understand lead mining, be well recommended as a miner, and of good character. A person acquainted with the Spanish language will be preferred.—Applications, with testimonials, to be forwarded to Mr. WEBB, C.E., 11, New Broad-street, London. 48

MINING CAPTAIN WANTED, to proceed to the vicinity of Bilboa, in SPAIN. He must be duly qualified, understand lead, and speak the Spanish language. Such a person may address me (by letter only), with testimonials, during next week. SAML. CARDOZO, Mining Accountant and Agent. 3, Old Broad-street, Oct. 27, 1854. 49

WANTED, the MINING JOURNAL at HALF-PRICE, to be delivered every Tuesday.—Address, "A. B.," No. 122, St. George's-street, St. George's East. 50

STEAM-ENGINE.—WANTED, a HIGH-PRESSURE VERTICAL or HORIZONTAL WINDING ENGINE, 12 to 15 in. cylinder, with BOILER, complete; a portable engine would be preferred.—Particulars, with price, to be sent to Mr. JACOB JAMES, mineral surveyor, Newbridge, near Newport, Monmouthshire. 51

WEIGHING MACHINE.—WANTED TO PURCHASE, a SECOND-HAND 10 or 12 tons WAGON WEIGHING MACHINE, of good construction and condition.—Particulars, stating lowest price required and where it can be inspected, to be sent (pre-paid) to Mr. C. L. POPE, 35, Fenchurch-st., London. 52

FIRE PROOF SAFE WANTED, SECOND-HAND, medium size, constructed on most approved principles.—Address, stating maker, dimensions, weight, lowest cash price, with other particulars, "Merchant," Jamaica Coffee House, Cornhill. 53

BARYTES FOR SALE.—BARYTES, in the CRUDE or MANUFACTURED STATE, of best quality at moderate prices, CAN BE HAD from Mr. JAMES BRYDEN, 21, Govan-street, Glasgow. 54

KNOCKATRELLANE COPPER MINING COMPANY.—Notice is hereby given, that a GENERAL MEETING of the shareholders will be HELD on Wednesday, the 1st day of November next, at Two o'clock, for the purpose of winding-up the affairs of the company. By order,
Cannon House, 28, Queen-street, Oct. 23, 1854. FRANCIS STOKES, Sec. 55

TRENAULT LIME AND COPPER MINING COMPANY.—Shareholders are requested to ATTEND the FURTHER ADJOURNMENT of the GENERAL MEETING, on Wednesday next, the 1st November, at the company's offices, when, if cash be not forthcoming to pay debts and carry on the works, the affairs of the company must be positively wound up. By order,
5, Martin's-lane, Cannon-street, Oct. 26, 1854. WM. ANDREWS, Sec. 56

IMPERIAL BRAZILIAN MINING ASSOCIATION.—NOTICE.—The Directors of this association have made a CALL of TEN SHILLINGS on each of the shares of this association, and the proprietors are requested to PAY the same on the respective shares on or before Monday, the 13th day of November next, to the London and County Bank, 21, Lombard-street, the bankers of the association. No transfer can be made until payment of the call. By order,
Winchester House, Old Broad-street, Oct. 23, 1854. JOEL HITCHENS. 57

MARIQUITA AND NEW GRANADA MINING COMPANY.—NOTICE TO SHAREHOLDERS.—The Committee of Investigation, desirous of relieving the anxiety of the shareholders as to the progress that has been made in their investigation of the company's affairs, avail themselves of the earliest opportunity of stating that they are now ready with their report, and are only waiting for the directors to convene a general meeting of shareholders, to forward a copy to each of the registered proprietors. In the meantime, the shareholders are requested to withhold their promises or proxies until they have received the committee's report.
Oct. 28, 1854. HENRY JAMES CASTLE, Chairman of Committee. 58

THE NEW LINARES MINING AND SMELTING COMPANY.—Notice is hereby given, that an EXTRAORDINARY GENERAL MEETING of the shareholders of this company will be HELD at the London Tavern, Bishopsgate-street, London, on Saturday, the 4th day of November next, at Twelve o'clock precisely, for the purpose of increasing the capital of the company by the issue of new shares, pursuant to the provisions of the Deed of Settlement of the company; or of raising additional funds in such way as the meeting may determine; and of passing such resolutions as may then be decided upon for carrying out the objects aforesaid.
London, Oct. 24, 1854. By order of the Board, R. RUDING, Jun., Sec. 59

THE ARDENNES (OF BELGIUM) COPPER, LEAD, AND SULPHATE OF BARYTES MINING COMPANY.—The shareholders of the above company are hereby informed, that an EXTRAORDINARY GENERAL MEETING will be HELD on Wednesday, the 15th November, 1854, at Two o'clock in the afternoon, at the office of the company in Brussels, No. 49, Rue Traversière, in the parish of St. Josse-ten-Noode. This meeting will have, for his chief object, to deliberate, according to Art. 6 of the Statutes, respecting the dissolution of the company, on the grounds provided for in the said Art. 6, and to adopt such measures as the circumstances may require.
The Managing Director, A. M. NEUBOURG TERCELIN.
Brussels, Oct. 23, 1854. 60

LIBERTY MINING COMPANY.—Notice is hereby given, that the next ORDINARY HALF-YEARLY MEETING of this company will be HELD at the London Tavern, Bishopsgate-street, on Thursday, the 2d day of November, at One o'clock precisely, to transact the ordinary business of the company; and that, immediately after the conclusion of such business, the said MEETING will be made SPECIAL, for the purpose of considering a proposal for dissolving this company, and selling the mines and property to a new company, or for adopting such other measures for raising money as may be deemed expedient. 61
By order of the Board, H. H. ROOD, Sec.
Dated this 16th day of October, 1854.
Mr. Crosse, the resident director, has arrived in England, and will attend the meeting.

ANGLO-CALIFORNIAN GOLD MINING COMPANY.—Notice is hereby given, that the ANNUAL GENERAL MEETING of the shareholders of this company will be HELD at the Freemasons' Tavern, Great Queen-street, Lincoln's Inn-fields, on Tuesday, the 31st inst., at Twelve o'clock, for the purpose of transacting the ordinary business of the company. 62
By order, GEORGE F. GOODMAN, Sec.
11, Adam-street, Adelphi, Oct. 16, 1854.

## PROPOSED GREAT CENTRAL RAILWAY THROUGH THE NORTHERN MINERAL DISTRICTS.

We have already alluded to the two routes of this proposed important line of railway; and as the subject has been warmly espoused by the noble and other landed proprietors in the various localities, the following letter, by Mr. J. Sewell, in answer to one of those gentlemen, will be read with interest:—

SIR,—I am in receipt of your favour on the advantages of the proposed great central railway to Roxburghshire, with your strong objections to the Liddesdale route, and earnest advocacy of the Teviothead and Langholm route instead. As it is probable that you only give expression to what may be a prevailing impression in Roxburghshire, for want of clear information on the subject, I am greatly obliged by your remarks; and as an old and esteemed acquaintance, whose patriotism and zeal for "Eske and Teviotdale" pervade every sentence of your letter, allow me to submit the reasons which have led to Liddesdale being the chosen route of the Great Central Railway, and to anticipate your complete acquiescence in the validity of these reasons.

With your usual tact and skill, you appeal warmly to that patriotic feeling I strongly echo, and is thus eloquently clothed in language by Sir Walter Scott:—

Breathes there the man with soul so dead,
Who never to himself hath said,
This is my own, my native land?

And again—

Land of brown heath and shaggy wood;
Land of the mountain and the flood;
Land of my sires! What mortal hand
Can e'er untie the filial band
That knits me to thy rugged strand?

With the sentiments of this quotation from the poet of my native stream, "sweet Teviot," I cordially agree, and have fully acted on to the utmost of my ability, as it is to this patriotic feeling that the proposed extension of the Great Central Railway to Hawick is due; but will a similar feeling cordially respond in Teviotdale to a native engineer?*

In 1846, as a shareholder, and as a contributor to the metropolitan and provincial press, I earnestly supported the then proposed extension to Carlisle from Hawick; and I freely confess that, with such eminent statesmen as the Duke of Buccleuch, the Earl of Minto, and Sir James Graham, as supporting witnesses, the failures then are still inexplicable to me. Whether too much reliance was placed on the prestige of these distinguished legislators—whether that prestige was or was not abused in any way—and whether too little attention was given to local support, as embodied by public meetings in resolutions, and other legitimate and acknowledged means of giving weight and form to public opinion, I know not; but, perhaps, some day the curtain may be withdrawn, and reveal the want of an efficient commander to lead the forces into action successfully. It was notorious at the time, and also much commented on, that while the enthusiasm of Dumfriesshire materially aided the success of the Dumfries line against much greater cause of opposition from the Caledonian, yet the lukewarmness of Roxburgshire, and the hesitating evidence given in many cases, sealed the fate of the Carlisle extension, just as bad soldiers would have sealed the fate of "Alma," had not Scotia's valiant sons, led on by a gallant Campbell, cleared the way of overpowered friends and stern opponents. Such, my dear Sir, are the feelings which have animated, and still animate me in seeking to give a railway to my native country; but no Scotsman would wish to see in any contested war the generalship of Flodden re-enacted in choosing a bad battle field, associated only with successive defeats, or abandonment by its defenders, whilst a superior one was open to selection in the land of "border exploits" and of chivalry.

In answering your objections, it will help to elucidate the subject to classify them as follows:—1. That Langholm is much more important than Newcastleton: hence the old Ewes route is preferable to the new Liddesdale.—2. That the old route could be greatly improved by going by Giddenscleuch instead of by Mossepaul.—3. That the Liddesdale route is less beneficial to the counties of Roxburgh, Selkirk, and Berwick than the old Teviothead route.

These headings, I believe, fairly embody your objections and suggestions; and with your permission I will answer them consecutively.—1. That Langholm is much more important than Newcastleton at present is fully admitted; but the question is not one depending on the present relative importance of these towns, but on those of Cumberland, Dumfriesshire, Roxburghshire, Selkirk, and Berwick. It must be borne in mind that from Longtown to Hawick it is within a fraction of 35 miles, either by Langholm or Newcastleton, so that, as regards distance, there is no difference of the routes to Hawick of the least consequence. On the Teviothead route, Langholm alone attracts attention, and chiefly requires a southern outlet towards England. This a short branch to the Liddesdale line would provide, and also open up a new market in North Tyne to Langholm produce. From Langholm by Teviothead to Hawick the population is very scanty, and the gradients severe, without a single mineral all the way—no very inviting picture to railway proprietors, or, as has been proved by their decisions, to parliamentary committees. As Canoby coals and lime are common to both routes, in this respect they are also alike; but along the Liddesdale route lime and coals are both found—the lime especially of very superior quality for making iron, as proved at Bellingham Iron-Works, or for building operations, as is well known in Teviotdale.

Newcastleton, it is true, is at present little more than a country village; but with the stimulus of a railway—the proximity of water, coals, iron, and lime, what physical reason exists why Newcastleton should not become an important mart of enterprise? Almost central between Hawick and Carlisle, Annan, and North Tyne, and surrounded by vast grazing farms, the position of Newcastleton is at least equal to that of either Selkirk, Hawick, or Galashiels, for manufactories. Would it not, then, be the patriotic duty of a railway company to hold out one friendly hand to flourishing Langholm to push it onwards; whilst with the other it raised Newcastleton to great eminence, and made the south of Scotland what its natural advantages of seaports, water, coals, and produce, fairly entitle it to become—the Yorkshire and Lancashire of Scotland?

Can I doubt that you will acquiesce in this view, and agree with me that, even as regards Langholm, the Liddesdale route is unobjectionable, and, as regards the country generally, much more favourable than the Teviothead route? In the second suggestion, that the old route may be amended by Giddenscleuch, I quite agree, and had it surveyed early last spring by Mr. Thomson, of Brienysban Ewes, whose report confirmed my own opinion of its superiority over the Mossepaul route. As it may be useful generally, I will give the various heights from Hawick to Langholm. The rails at Hawick station are about 316 ft. above the level of the sea; and Langholm is about 241 above the same level. The summit at the 12 miles from Hawick station, near Linhope Brae-head, is about 843 feet above the sea level. This gives a rise of 497 ft. from Hawick, and a rise of 602 ft. from Langholm to the summit, or an average of 1 ft. in 96 over the 11 miles from Langholm. Starting at Hawick station level, the rise at 3¼ miles distance is 62 ft.; at 5½ miles, 146 ft.; at 7¾, 231 ft.; at 9 miles, 306 ft.; at 10 miles, 350 ft.; at 12 miles, or the summit, 497 ft. From the summit towards Langholm the line descends, and at 15 miles is 308 feet; above Hawick, at 19 miles, 100 ft.; and at 23 miles, or Langholm, about 105 below Hawick. These are near approximations, taken from parliamentary documents, and give a heavy working line up Ewes for mineral traffic, which is very different from receiving that traffic at the highest point, and only taking empty or partially loaded wagons up along inclines, as would be done at Liddelihead. Now, the Liddell summit is lower than the Mossepaul summit, and is about the same height as it would be by a tunnel at Ewes-door into the haughs of the Teviot at Giddenscleuch; but no mineral, or hopes of any at this tunnel, gives any encouragement in this quarter.

The old antimony mines of Eskdale Moor are the only ones I know of, and I should be glad to receive any information regarding their history, stoppage, and the probable quantity of antimony to be got there. It was remarked that a very rich vein had been discovered and lost again, because the discoverers hoped to profit by it.

The summit of North Tyne and the Liddel nearly coincide, and as coals, iron, and limestone are there in great abundance, which would go eastward to Hawick, and westward to Langholm, Carlisle, Annan, and Dumfries, down hill both ways, I think I may now fairly appeal to your own patriotism, and rest satisfied that the response would be, the amended route by Giddenschureh has been fully investigated, but given up for one in every respect preferable for the common good of the country, and especially of Roxburghshire.

I now come to the third and most forcible objection, if it could be substantiated—that the Liddesdale route is less beneficial to the south-east of Scotland than the route formerly proposed by Teviothead. It has been stated already that in point of distance and of gradients there is no material difference, so that for all practical purposes they may be regarded as alike in these respects, and for Hawick, Galashiels, Kelso, and the surrounding districts. But you urge the value of Langholm as a market for the agricultural produce of Roxburghshire; but as Langholm would have railway connection with Hawick only a few miles longer than by the old route, this market would not be lost to Roxburghshire, for at the usual tonnage rates for grain or flour it would only make a very small difference per sack of 20 stones. If then Langholm can be fed from Hawick by the Liddesdale line, and some 10,000 or 12,000 new customers, independent of Liddesdale, added to Roxburghshire, would you not hold up both hands for the new line, as fraught with many advantages to your native country and favourite associations? Probably you will say, or think, satisfy me of this, and I will, however reluctantly, give my assent to do so.

Well then, agreed, and bear with me whilst I submit for your consideration a few facts, in the hope of giving that satisfaction. First permit me to remark that you may have seen or heard of the superior Tyne Head coals carried to Hawick a few years ago by ponies, as I have frequently done. Now this coal field lies near the summit of the Liddesdale line at Limekiln Edge, and the following data are taken chiefly from evidence given before a parliamentary committee, of which Lord Stanley was chairman, and admitted as sufficient to justify the unanimous sanction of the opposed Border Counties Railway to reach those minerals from Newcastle.

1. The iron field near Bellingham, considered inexhaustible with its shale seam of 27 or 30 feet in thickness, containing ironstone of very superior quality, averaging 9680 tons per acre, and on which some 50,000*l.* has been already expended, but lying idle at present for want of railway transit.

2. The Plaskett coal field, 16 miles nearer Hawick than Bellingham, estimated to extend over an area of 20 square miles, with one of its seams 4½ feet thick, and of good quality. It was the out croppings of this coal field that was formerly carried to Hawick in bags, on the old pack-horse system, by the Slitrig road.

The price of these coals, at the pits, was given as about 3s. 6d. to 4s. per ton, or say 6s. 6d. to 7s. per ton at Hawick. Besides this coal field there are the Redwater and Hawkshaw coal fields, near Bellingham. The rich hematite iron ores of Whitehaven, and the superior nodule iron ores of Bellingham, when mixed and manufactured by the Plaskett coals, yield a large produce of superior quality; like as a judicious admixture of blood in breeding cattle or sheep improves the breed, or as the proper admixture of soil and manure increases the produce in quality and in quantity. As Bellingham is only about 48 miles by the proposed Great Central Railway from Carlisle, and about 32 miles from Hawick, whilst the Plaskett coal field is only about 22 miles from Hawick, a large traffic of iron ore towards Carlisle, or Whitehaven ore from Carlisle, and of coals towards Hawick, would be the probable result to the railway and to the mineral proprietors, besides the local advantages.

The population of North Tyne is about 11,000, excluding Hexham, and the ironworks are expected shortly to increase it to 16,000, of which a large portion would earn good wages, and prove excellent customers for the produce of Scotland. Hexham would be about 48 miles from Hawick (with Stagshaw bank adjoining), and contains 4601 inhabitants, with about 4000 quarters of wheat, 2000 quarters of oats, 1500 quarters of rye, and 1000 quarters of barley, annually sold in its market. North Tyne is not a grain-producing district, and the supplies of all kinds are chiefly imported from Newcastle and Hexham by eight carriers, whose receipts for carriage alone are estimated at 1500*l.* per annum. Now, if you will ask your friend, Mr. Turnbull, of Melrose Mill, or your brother farmers who frequent Hawick market, or appeal to the farmers of Kelso Market, for the fair value to them of a mining and iron foundry population of 16,000, placed within 32 miles of Hawick, I doubt not but that they would readily tell you, and be inclined to take active steps to promote any railway giving them such a market, besides those they now supply.

The lime of Canoby, Liddesdale, North Tyne, and Limekiln Edge brought cheaply to Teviotdale, would contribute to increased fertility of soil, and cheap coals render water-power of less importance to the manufacturers of Hawick, Galashiels, and other places. Such are the reasons which have led to the selection of the Liddesdale route, and I trust that my anticipation is realised, and that you fully admit them as justifying that selection. It remains for Teviotdale and Tweeddale to do justice to themselves, and if fully satisfied of the manifold advantages of the Liddesdale route, to give it every support in their power, which they can readily do at the very small cost of 2½ per share pecuniarily, or by efficient exertions as active promoters in their respective circles or spheres of influence. In Teviotdale generally it would appear that such zeal as your own was exceptional, and that it was expected that the Duke of Buccleuch should mainly bear the cost of making a line from Hawick to Carlisle. But is this wise? Is it even prudent? Would the Duke of Buccleuch be the only recipient of advantages from such a railway? Clearly, "No" must be the response to these queries. Why then look for the Duke of Buccleuch sustaining all, or nearly all, the cost? Why not the good yeomen of Teviotdale, and the burgesses of Roxburghshire put their own shoulder to the burthen, and relying on the maxim "that Providence helps those who help themselves judiciously," secure success? A clear, practical, business-like, reply to this question by Roxburghshire is highly desirable. Can you give it? or obtain it?

Since the Liddesdale route would promote the interest of the Duke of Northumberland, Sir William Elliott, Bart., of Stobs, and other landed proprietors, besides the Duke of Buccleuch, no such call on the resources of his Grace of Buccleuch is required for the new route as seems to have been sought for the old one. It is expected that the landed proprietors will give their land at moderate rates, and their patronage politically, as well as locally, in favour of the Great Central. Can you then urge any good or valid reason why the Earl of Dalkeith should not extend the sphere of his influence as a public man by becoming chairman of this admittedly important undertaking. The Marquis of Chandos, the Earl of Carlisle, and many other noblemen and statesmen shine as railway chairmen or directors, and where do they appear with more advantage than when heading the legitimate enterprise of their age for their own and the nation's advantage, for it is a position at once honourable and patriotic. The promoters of the Great Central Railway look for, and reasonably expect, the support, both active and energetic, of the whole influence of Teviotdale and of Tweeddale, to secure to these districts the benefits which the proposed railway would, undoubtedly, confer. This support can be given efficiently in a very simple manner; for instance, in every locality there is some public spirited man who could entirely, in his own language, draw up a resolution firmly expressing the advantages which the Great Central Railway would confer on the particular locality included in the resolution. The more differently worded that each resolution is the better, and a copy of it should be sent to Messrs. Sewell and Co., 8, New Palace-yard, London. Petitions to both Houses of Parliament should be drawn up, based upon each resolution, and be influentially and numerously signed, as compared with the population of each locality. Such are the acknowledged means of influencing Parliament when the Legislature fully admit and act upon, especially as regards railways.

Now, at each market table, at each town council meeting, in each village, and in each district in Roxburghshire, Selkirkshire, and Berwickshire, such resolutions could be passed and petitions signed at little or no cost, beyond the mental toil of some willing advocate, or able volunteer, in a truly good cause. At county and other influential meetings of the kind similar resolutions and petitions could be prepared to form the corinthian capital of the handsome column raised by the tenantry, manufacturers, burgesses, and general community on the pedestal of the advantages of the Great Central Railway. In this way, at a nominal cost, the desires, the influence, and the wealth of the district could be organised in one efficient phalanx, and largely contribute to success.

Convinced, I doubt not, of the marked superiority of the Liddesdale route, will you be so good as to lend your aid and your talent in giving all due publicity to this communication both through the press, by precept and by example, in order that the blot on the escutcheon of Roxburghshire, of being literally "cabined and confined" by a railway company, may be erased, and a railway obtained to Newcastle, Carlisle, and Leeds.—*Great Western Railway, London, Oct. 21.* J. SEWELL.

* A high authority has said, "A prophet has no honour in his own country."

THE INDURATED STONE COMPANY.—On several occasions, in the columns of the *Mining Journal* during and since the year 1848, we have called particular attention to and fully described a most interesting process, patented by Mr. William Hutchison, of Tonbridge Wells, for indurating the softest, most porous, and worthless sandstone, and other similar materials, paper, pasteboard, plaster, and other substances, rendering them as hard as granite, perfectly impermeable to water, and totally unaffected by atmospheric or other influences, except actual violence. On the 18th November in the above-named year, an article appeared, entering more fully than usually into detail, we having just previously paid a visit to the works, and made ourselves thoroughly acquainted with the qualities of the materials operated on, and the entire *modus operandi* in practice. On the 26th of August last we stated that a company was about being formed, for carrying out the patent on such an extended scale as would bring it into that commercial repute and importance which its value demands, and we are happy to say that such may now be considered established, of which we have before us a prospectus; and from the names of several gentlemen attached as directors, of high standing and business habits, the best results may be anticipated. The operations are at present confined to the works, which were established by Mr. Hutchison at Tonbridge Wells, for the purpose of operating on soft and porous sandstone, at King's Quarry, from which place there is railway communication to all parts of the kingdom; but many other equally eligible situations, in a geological and economical point of view, are to be found in various parts of the islands, where no doubt the operations of the company will be at once directed, either to work themselves, or to grant licenses to others. Materials particularly suited to this process will be found among the various sandstone formations, the oolites, the chalk, and other tertiary deposits, and even among the more primitive rocks, particularly when in a state of partial decomposition. The invention is, however, not confined to stone in a solid state, as refuse sandstone, or other soft and friable material, may be ground fine, and mixed with loam, and while in a soft state, moulded or set into any form, and afterwards rendered of almost metallic hardness by the process. When we consider that masonry of every shape, the most elaborate architectural embellishments, and every description of decoration, can be produced by the saw and chisel on soft materials in inconceivably less time than in the more durable natural stones and marbles, and that these can be rendered almost indestructible at little cost, it may easily be conceived that the products under this patent will be tendered to the public at something like half the usual price of such commercial commodities. The field of operations is still further extended by its application to paper, pasteboard, or other similar materials, producing a substance beautifully adapted for light roofing, lining damp walls, and other similar purposes, and to papier maché and other pulps, after being cast into mouldings, busts, statuettes, and other artistic designs. It will thus be seen that the process is adapted to materials for building purposes, which will exclude all damp, harbour no vermin, preserve timber from decay, produce warmth, and suffer no delapidation; particularly for hydraulic purposes, bridges, sea walls, docks, tanks, pipes, drains, &c.; architectural and other decorations of every description, to monumental purposes, tombs, mural tablets, hermetically sealed coffins, and in fact, for every use to which marble, stone, slate, and many other materials, have hitherto been indispensible. With respect to colour, although, black, brown, and white, have hitherto been principally employed, a large variety of colours may be successively produced; and where required, the most finished polish can be obtained. Sir Roderick I. Murchison has recorded a most unqualified favourable opinion of the invention, and expresses his full belief that it only requires to be known to be generally and thoroughly appreciated; and yet Mr. Hutchison, unfortunately like too many of the producers of inventions, which eventually prove of vast public utility, has been surrounded with difficulties, and has had numerous obstacles to surmount. It is however, highly satisfactory, after six years' perseverance, to have succeeded at last in the formation of a company, and thus obtaining the aid of the capitalist to develope the capabilities of the process; and we think it must appear evident, not only from these remarks, but from the results of actual practice, that the shareholders will not have to regret their investment, but that a very short period will prove that they have connected themselves with a most profitable and permanent undertaking.

RAILWAY PROGRESS—THREE HUNDRED MILES PER HOUR.—At the American Institute Farmers' Club, in New York, a paper was recently read by Julius Meigs upon the subject of rapid railway travelling, in which he stated that while with others he admired the progress made in the velocity of trains, up to 100 miles per hour, which had been accomplished in England, he entertained views far beyond anything yet ventured to be expressed. The paper then alluded to the great step taken by the Emperor of Russia, in cutting a road in a direct line, for 500 miles, from St. Petersburg to Moscow, 200 feet wide. This was the first great step towards the ultimatum of railway transit, and with such a road, with rails ten times the strength of those at present in use, with locomotives on wheels of 12 or 15 ft. diameter, an equivalent number of signals, and times perfectly settled, and the whole line walled in, instead of 100 miles, 300 miles per hour may be attained. It appears to us that the writer of this paper forgets that there is a maximum to every sub-lunar operation, even to railway travelling; we have no doubt but on a continuous straight line 100 miles per hour may be safely accomplished, provided proper precautions are taken; but 300 miles an hour (!) exceeds the velocity of a ball from a cannon, and involves a rapidity in the action of piston, valves, and cranks, heating and destruction of metal, in the formation of steam and quantity of water necessary to be evaporated per minute which strikes us forcibly, with all our present experience of steam dynamics, would prove impossible, and would, if attempted, send the whole concern to "almighty smash."

SUBMARINE TELEGRAPH COMMUNICATION WITHOUT WIRES.—In the *Mining Journal* of the 26 September we noticed a successful experiment at Portsmouth, showing the possibility of sending telegraphic messages, across or through a body of water without the aid of submarine wires. On this subject we have the following information from New York:—"We have recently learned that telegraphic experiments have been made in England, and with perfect success, by which, with an operating battery on one side of a mill dam, 500 feet across, and the corresponding one on the other side, telegraphic messages were conveyed through the water without the aid of connecting wires; and it is contended that in the same manner a telegraphic message may be sent across the British Channel without continuous cables of wire. The first impression of everybody, after reading this statement, would be that the experiment is new. It is proper to correct the mistake: 100 years ago, Dr. Franklin, the American philosopher, made the same experiment on a larger scale, and with the same success. And nine years ago Prof. Morse made successful experiments across the Susquehanna River, and expended a good deal of time and money, with the hope of being able ultimately to transmit intelligence in the same way across the Atlantic. In 1748, Dr. Franklin invited his philosophical friends to what he termed an electrical feast, on the shore of the Schuylkill, near Philadelphia, where he tried his experiments. In describing them to his friend, Peter Collinson, of London, he uses the following language:—'Chagrined a little that we have hitherto been able to produce nothing in this way of use to mankind, and the hot weather coming on when electrical experiments are not so agreeable, it is proposed to put an end to them for this season somewhat humorously, in a party of pleasure on the banks of the Schuylkill. Spirits at the same time are to be fired by a spark sent from side to side through the river without any other conductor than the water; an experiment which we some time since performed to the amazement of many. A turkey is to be killed for our dinner by the electric shock, and roasted by the electric jack, before a fire kindled by the electrified bottle, when the health of all the famous electricians of England, Holland, France, and Germany, are to be drunk in electrified bumpers, under a discharge of guns from the electrical battery.'"

# Original Correspondence.

## THE EXTRACTION OF GOLD BY MEANS OF MERCURY.

SIR,—I am induced to forward you for insertion, if you think the matter sufficiently important, a series of experiments, or, rather, a statement of the results of a few of the experiments, I have made in the amalgamation of auriferous matters; inasmuch as I have often seen it urged in your Journal that it was useless to expect satisfactory or economical results from the employment of amalgamation processes, more especially with pyritous and other mineralised substances. That this is an error, the following experiments will, I think, sufficiently prove, as I have submitted to experiment the more ordinarily occuring minerals that carry gold. Indeed, I am fully convinced that there is no practical difficulty to be apprehended in the treatment of most auriferous minerals by amalgamation, with the exception of those containing much arsenic or antimony; in such cases calcination, carefully conducted in a properly constructed furnace, will suffice to render them fitted for the process to which I submit minerals not containing such matters. All the results appended were obtained by the use of my patented machinery, under my own immediate supervision, I am, therefore, in a position to be fully satisfied of their perfect accuracy. I give the results just as obtained, and in support of my statement as to the applicability of an amalgamation process to most ores, I need only refer to the amounts of gold left in the tailings of each experiment. JOHN MITCHELL.

*Assay Office, Dunning's-alley, Bishopsgate-street Without, Oct. 22.*

EXPERIMENTS ON QUARTZ SAMPLES.—All these, with the exception of two or three, were admixed with more or less of mundic, blende, copper pyrites, galena, &c.

The first column shows the weight of the sample operated on, the second the yield of fine gold per ton, and the third the amount of gold per ton in the tailings:—

| Cwts. | qrs. | lbs. | Ozs. | dts. | grs. | Grains. |
|---|---|---|---|---|---|---|
| 0 | 0 | 5 | 1 | 8 | 0 | 4¾ |
| 0 | 0 | 5 | 2 | 16 | 0 | 5½ |
| 1 | 0 | 21 | 0 | 3 | 14 | 3¼ |
| 0 | 0 | 25 | 0 | 7 | 2 | 4½ |
| 0 | 1 | 4 | 0 | 3 | 22 | 3¾ |
| 0 | 1 | 22 | 0 | 6 | 11 | 5 |
| 2 | 0 | 0 | 0 | 2 | 6 | 4 |
| 0 | 0 | 4 | 0 | 2 | 8 | 2½ |
| 2 | 0 | 0 | 0 | 1 | 5 | 2¾ |
| 2 | 0 | 0 | 0 | 4 | 2 | 5 |
| 2 | 0 | 0 | 0 | 0 | 8 | 2¼ |
| 2 | 0 | 0 | 0 | 0 | 6 | 2 |
| 2 | 0 | 0 | 0 | 1 | 12 | 3½ |
| 1 | 0 | 0 | 0 | 4 | 10 | 5½ |
| 0 | 0 | 28 | 0 | 3 | 4 | 3½ |
| 0 | 3 | 21 | 0 | 1 | 12 | 3 |
| 0 | 0 | 24 | 0 | 0 | 7 | 3 |
| 1 | 0 | 0 | 0 | 6 | 10 | 5¼ |
| 0 | 0 | 14 | 3 | 17 | 8 | 4 |
| 0 | 0 | 28 | traces | | | traces |
| 0 | 1 | 7 | 0 | 8 | 22 | 2½ |
| 1 | 0 | 14 | 0 | 1 | 2 | traces |
| 0 | 1 | 23 | 0 | 3 | 2 | 1½ |
| 0 | 1 | 1 | 0 | 6 | 10 | 3¾ |
| 0 | 1 | 21 | 0 | 4 | 23 | 3 |
| 0 | 0 | 26 | 0 | 1 | 16 | 3 |

Average amount of gold in tailings, 3 18-100ths grains per ton.

SAMPLE OF SPATHOSE IRON.

| | | | | | | |
|---|---|---|---|---|---|---|
| 2 | 0 | 0 | 0 | 0 | 15 | 2½ |

SAMPLES OF MUNDIC.

| | | | | | | |
|---|---|---|---|---|---|---|
| 0 | 3 | 8 | 0 | 2 | 0 | 4¼ |
| 0 | 3 | 15 | 0 | 0 | 22 | 3¾ |
| 0 | 2 | 0 | 0 | 10 | 0 | 4 |

Average amount of gold per ton in tailings, 4 grains.

IRON PYRITES, WITH GOSSANY QUARTZ.

| | | | | | | |
|---|---|---|---|---|---|---|
| 2 | 0 | 0 | 0 | 0 | 2¼ | 2 |
| 2 | 0 | 0 | 0 | 0 | 6 | 1¾ |
| 2 | 0 | 0 | 0 | 0 | 3½ | 1¾ |
| 1 | 0 | 0 | 0 | 1 | 18 | 3½ |
| 2 | 3 | 0 | 0 | 0 | 8 | 2¾ |
| 3 | 0 | 0 | 0 | 1 | 7 | traces |
| 3 | 0 | 0 | 0 | 0 | 6 | traces |
| 3 | 0 | 0 | 0 | 1 | 4 | traces |
| 1 | 0 | 14 | 0 | 1 | 2 | 4 |

Average amount of gold per ton of tailings, 1½ grain.

COPPER PYRITES SAMPLES.

| | | | | | | |
|---|---|---|---|---|---|---|
| 0 | 0 | 9 | 0 | 8 | 7 | 4¼ |
| 0 | 3 | 21 | 0 | 1 | 12 | 3¾ |
| 0 | 0 | 11 | 0 | 5 | 2 | 2½ |
| 0 | 0 | 4 | 8 | 3 | 8 | 5½ |
| 0 | 1 | 5 | 0 | 4 | 4 | 3¾ |
| 1 | 0 | 26 | 0 | 0 | 21 | 3½ |
| 0 | 2 | 0 | 0 | 6 | 11 | 4 |

Average amount of gold per ton of tailings, 3 8-10ths grains.

BLENDE SAMPLES.

| | | | | | | |
|---|---|---|---|---|---|---|
| 1 | 0 | 0 | 0 | 7 | 0 | 4¾ |
| 2 | 0 | 0 | traces | | | traces |

SILVER-LEAD SAMPLES.

| | | | | | | |
|---|---|---|---|---|---|---|
| 2 | 0 | 0 | 0 | 6 | 21 | 5 |
| 2 | 0 | 0 | 0 | 1 | 21 | 4 |
| 0 | 1 | 8 | 0 | 17 | 14 | 3¾ |

Average amount of gold per ton of tailings, 4 2-10ths grains.

TIN STONE.

| | | | | | | |
|---|---|---|---|---|---|---|
| 3 | 2 | 0 | 2 | 1 | 4 | 4¾ |

SULPHATE OF BARYTES.

| | | | | | | |
|---|---|---|---|---|---|---|
| 0 | 2 | 0 | 0 | 16 | 17 | 5¼ |

GOSSAN.

| | | | | | | |
|---|---|---|---|---|---|---|
| 4 | 1 | 0 | 0 | 0 | 22 | 4 |

## ON THE EXTRACTION OF GOLD FROM ITS ORES.

SIR,—I have always found your Journal open to any and every information connected with mining and the extraction of the metals from the various ores. I have also watched the numerous articles which have appeared from time to time in your valuable Journal with considerable interest, expecting to meet some process practically laid down by the various writers for the extraction of gold from the mineral ores, and less from the pocket. I have no doubt but that many of these writers could give a very simple direction to those unacquainted with the extraction of gold from the various substances in which it has been again and again stated that gold exists plentifully; but I must again say that I am disappointed in not finding some one who is practically or chemically acquainted with this subject giving some instructions or directions to the deluded public. I must, therefore, suppose it does not suit the interest of those writers who magnify their own knowledge to place before the public anything but what may appear a mystery; hence, they sell their mysterious books, their advice is sought after, and, of course, well paid for, the mystery of the gold extraction remains the same, and John Bull, who I must now call John Gull, still remains as ignorant as before. But the greatest mystery of all the gold extraction to me is, to think that the British public should have rendered up out of their pockets such a large amount of gold, and I now ask if it was by amalgamation, or any other machinery, that such an amount has been so easily extracted?

Truth is not always to be told by such as often lead on parties in their wild schemes, and should an honest practical man make a faithful statement when the rage for any scheme is afloat he is put aside as an alarmist, or not worthy of notice. I, for one, was put aside by many, on my late return from the gold regions, for stating that not one of the gold companies in Australia or California would ever pay their expenses. The St. John del Rey Company was named as a property I recommended in 1830; but, I say, slave labour, which can be had for 1s. per day, and by which more work is done underground than English miners will do out of England, but directed by the latter, is one of the reasons of success; the next, there are constant streams of water for stamping, drawing the stuff, and pumping the water out of the mine; and again, the nature of the formation in which the gold is found has not yet been met with, to my knowledge, either in Australia or California (see my paper in the *Mining Journal* of the 6th August, 1853.)

However, I will come to the point on which I again call public attention, and which, even now, may not be too late for some. There is a saying that "Wit bought is better than wit taught." The little that I have been taught is by long experience, which I am willing to teach others, and with this view I wrote in your Journal of the 4th Feb. last on a process by amalgamation for the trial of the various minerals said to contain such quantities of gold. Respecting that article I had many letters, stating that they could not extract the gold by my process, when the machines gave such wonderful results. I answered them by telling the truth, that there could not be any gold in the ores; had there been, they must have taken it out by following my directions.

I will now tell them, and the public, an amusing fact of a trial which I lately made to instruct some young friends of mine, who were about leaving for the gold regions. I first placed a quarter of an ounce of gold dust, very fine, in a saucer, adding half a pound of quicksilver, and cold water sufficient to cover the whole, which I stirred up with my finger, to show the difficulty there was in making the quicksilver take up gold. I told them that time and friction would accomplish this; but, in order to hasten the process, I replaced the cold by hot water, when, after a few seconds, all the gold mixed with the quicksilver, leaving the dirt or earthy matter only. After taking away all the water, I passed the quicksilver through the chamois leather (as described in my article of the 4th February last), when the amalgam remained in the latter; this I put on a clean plate of iron, and placed it on a slow, clear fire—in a few minutes the quicksilver evaporated, and the gold remained. This we again weighed, and found to be four grains less, which was found in the saucer, as dirt.

In order to prove to my young friends the efficiency of this process, I said I would astonish them by taking out more gold (apparently) than I put in, in my next experiment. I then took a stone of iron ore, bruised very fine, and put it into a large bottle, two-thirds filled with the iron ore. I weighed out another quarter of an ounce of fine gold dust, and put this, with the same quicksilver I used before, into the bottle; then filling it with hot water, I shook it well for a little time, and emptied it into a large washband basin. I then let a small stream of clear water run into the basin, stirring it well, until all the light portions of mud and other matters had been cleared; the heavier portions I passed from one basin to another, until all the dirt, apparently, had been taken out, re-passing the refuse a second time, to see if any portion of the quicksilver had escaped. I then took the quicksilver from the water, and passed it through the leather, as before, placing the amalgam on the bright iron plate, and evaporated the quicksilver, when the weight left was found to be ten grains more than the quarter of an ounce I had put in.

How is this? said my young friends: when the first trial without the iron ore lost four grains, and this trial with the iron ore has gained ten grains—certainly the iron ore must contain some gold? No, I told them; it was simply that a portion of dirt had mixed with the amalgam, which had increased the weight; but, had it been assayed, in the first and last cake, as we termed the prill, the quantity of fine gold would have been the same. Oh! replied my friends, we now see how it has been with the machines for the extraction of gold: put in your nest-eggs, and out comes an increased produce. This is truly laying the golden eggs; but they and myself have pity on the poor geese who have suffered so much by laying their golden eggs, and are now mourning over their loss.

This trial was perfectly correct; and if I were to put my small quantity of gold into a large portion of stuff, it must come out in the same way. Then, where is the mystery of extracting the gold from the ore, if there is any in it?

I shall now conclude by stating, that if any gentleman or mine agent will take the trouble, he can easily find if gold really exists in those ores which are reported to contain such quantities.—*St. Austell, Oct. 23.* JOHN DALLEY.

## ON THE GOLD MINING COMPANIES—No. IX.

HOW OPERATIONS COULD BE CONDUCTED TO A SUCCESSFUL ISSUE.

SIR,—Before proceeding to the calculations promised in my last, I am glad to say that I am able this week to furnish some more data relative to the Bendigo assays. I am now in a position to prove that the 32 assays referred to were taken from abandoned stuff, with the exception of one: they were made by a scientific gentleman, who understands the art of assaying as a metallurgist, and were tried over three or four times each, and the average struck. The cupel and all other scientific methods were used, and I am thus triumphantly able to answer Mr. Hopkins's remarks on the subject. I have also ascertained that the Victoria Gold Mining Company, of which he talked, never existed except upon paper, as the promoters could not induce the public to take up the shares.

I assume that the machinery of which I wrote has arrived and been erected in an eligible spot on the banks of some creek, and at a distance of not more than two miles from the auriferous ground. I estimate that 1500*l.*, at the outside, would purchase, transport, and erect these necessary works; but in order to give the greatest margin we possibly can, I will call it 2000*l.*, which will more than cover every contingent expense, such as huts, tents, horses, and every extra. To this we must add the passage out of the staff of the company, and their wages until the works begin, which is so much capital sunk; I estimate this at 400*l.*: thus we have 2400*l.* spent, the daily interest of which, at (say) 4 per cent., must be deducted from our profits, which is about 5s. 3d. per day. It would require eight labourers and one overseer to dig 24 tons of alluvium in the day. This may seem a large number, but, as in many places the ground will never have been broken before, it is a safe average, and I wish in my calculations to leave a considerable margin for contingencies. Two men are all that would be required at the works besides the engine driver and one of the principals. The earth could be carted by contract, at about 14s. a ton for that distance.

Putting, therefore, wages at the highest possible figure—a figure which cannot last,—and not taking into account the possibility of engaging Chinese labourers, who are numerous now on the diggings, and will always work much cheaper than Europeans, we have as follows, viz.:—

| | | | |
|---|---|---|---|
| Ten men, at 1*l.* per day | £10 | 0 | 0 |
| One engine driver | 1 | 5 | 0 |
| 1 ton of billetted wood | 3 | 0 | 0 |
| One overseer of the labourers | 1 | 5 | 0 |
| One overseer of the gold | 1 | 5 | 0 |
| Contract drawing of stuff, 24 tons, at 14s. per ton | 16 | 16 | 0 |
| 4 per cent. interest on 2400*l.* for one day | 0 | 5 | 3 |
| Wages of other officers, clerks, &c., for one day | 3 | 0 | 0 |
| Total | £38 | 16 | 3 |

We will now make three balances, on the supposition that we obtain 1 oz., ¾ oz., and ½ oz., on an average, to the ton. My readers must recollect that the stuff is to be selected with the collective knowledge of all the officers of the company, and determined on at the consultative board; and they will also bear in mind that the assays I have submitted to their notice averaged 3 ozs. to the ton.

Now, at 1 oz. per ton, we have as follows:—

| | | | | | | |
|---|---|---|---|---|---|---|
| 24 ozs., at 4*l.* per oz. | £96 | 0 | 0 | | | |
| Deduct from this 5 per cent. tribute, divided between the overlookers | 4 | 16 | 0 | = £91 | 4 | 0 |
| Expenses | | | | 38 | 16 | 3 |
| Balance | | | | £52 | 7 | 9 |

At ½ oz. per ton, we have:—

| | | | | | | |
|---|---|---|---|---|---|---|
| 12 ozs., worth | £48 | 0 | 0 | | | |
| Deduct the tribute | 2 | 8 | 0 | = £45 | 12 | 0 |
| Expenses | | | | 38 | 16 | 3 |
| Balance | | | | £6 | 15 | 9 |

At ¾ oz. per ton, we have:—

| | | | | | | |
|---|---|---|---|---|---|---|
| 18 ozs., worth | £72 | 0 | 0 | | | |
| Deduct the tribute | 3 | 12 | 0 | = £68 | 8 | 0 |
| Expenses | | | | 38 | 16 | 3 |
| Balance | | | | £29 | 11 | 9 |

Now, we must not assume we could do this every day in the year, otherwise our profits would be enormous, but we may safely reckon on reducing 24 tons three times a week, or making this profit 156 times a year. This supposes an average for wet days, when work could not be carried on to advantage, and from other causes, such as damage to the machinery, &c.; neither need the men ever be supposed to be idle, when paid for work, as stuff could always be being procured and carted to the works, at times when the engine was idle. Now, by multiplying the first balance by 156, we obtain—

| | | | | |
|---|---|---|---|---|
| For 1 oz., a return at the end of the year of ... | £8167 | 1 | 8 |
| For ½ oz. " " " " ... | 1058 | 17 | 0 |
| For ¾ oz. " " " " ... | 4615 | 13 | 0 |

But our capital actually expended was only 2400*l.*; therefore, at 1 oz. per ton of earth, we should obtain a dividend of upwards of 320 per cent.; on ¾ oz., a dividend of about 200 per cent.; and on ½ oz., 50 per cent., on the capital actually spent. By carrying the calculation still farther, it will be found that a yield of 8 dwts. 12 grs. per ton will pay all expenses. But these expenses have been rated at a most extravagant figure, and, I think, by good management they might be reduced fully 20 per cent. The question, then, finally resolves itself into this—Will the abandoned workings, selected with judgment, pay 8 dwts. to the ton? Again,—Will new ground, taken out on the license system, and mined in the usual way, but with its auriferous strata carted to the works, pay 8 dwts.? My assays averaged upwards of 3 ozs. to the ton; and even assuming Bendigo has been worked and re-worked since that time over and over again, what has been the fate of the abandoned ground at the Ovens, at Mount Keerong, at the Avoca, and at 50 other places which might be named? I will endeavour in my next to show how operations may be conducted in new ground on the ordinary license system; and, in the meantime, I challenge any person who may read this article, and who has been at the diggings, to dispute or disprove the facts I have asserted, or gainsay my conclusions. Frivolous errors may be found in the calculation, but the main facts will remain the same,—that, assuming the abandoned ground is as rich as it is generally supposed to be, on my plan an enormous dividend can be paid. Neither is the experiment by any means a costly one; in fact, it presents the only rational method of solving the great problem of how, at the present time, gold companies can succeed in Australia. H. E. MICHEL, B.A.

*Oct. 26.*

## AUSTRALIAN COMPANIES—SUGGESTED REGENERATION.

SIR,—In the letter of Mr. Guedalla, dated the 19th, which I have particularly referred to elsewhere, he proceeds to give the following important opinion:—"If we have no more shuffling tricks, I have hopes of a good time coming. At any rate, it is a fair experiment, and, as I still keep my shares, I should not recommend any one to part with theirs at the present low value of 15s. each." In Mr. Evan Hopkins's letter, dated the 17th inst., he writes:—"Still, the value of quartz veins were, and are, well known, and the process of extracting the gold from them the easiest of any. I do not wish to depreciate Mr. M'Arthur's quartz vein; my object is simply to inform him that there is no difficulty whatever in extracting gold from quartz; indeed, nothing can be easier. The real difficulty hitherto has been to find quartz rich enough to pay for working; there is not one on record." I cannot but feel that these opinions are of great weight. I do not wish to state anything contrary to them; at the same time, I have every possible reason to believe that the Turon Ridge vein (the description of which you were so kind as to publish) is rich enough to pay for working; at any rate, I can state as a positive fact that it is equal, and by many is estimated as superior, to the Great Nugget Vein. Here, then, are three distinct opinions I would ask permission to assume as facts:—1. That the shares of the Great Nugget Company are not valueless; and that the present market value is not sufficiently tempting to induce the experienced to sell, but that the chances of future success are sufficient to induce parties holding them to retain their interest.—2. That no real difficulty exists in extracting the gold.—3. That the Turon Ridge offers an equal chance with the Great Nugget Vein.

The following eight Australian gold companies represent a capital of 720,000*l.*:—

| | |
|---|---|
| Australian Cordillera | £60,000 |
| Australian Mutual | 60,000 |
| Lake Bathurst | 100,000 |
| N. S. Wales Gold Mine | 60,000 |
| Australian Consols | 60,000 |
| Australian Freehold Mine | 100,000 |
| Lewis Hill Range | 80,000 |
| British Australian Gold Company | 200,000 |

A vast number of these shares have been eagerly purchased by persons of small means, and much misery has been the result. I would now invite all who have suffered by making purchases of scrip in the above companies, and who did so honestly and conscientiously for legitimate investment, to forward me their names and residence, with the particulars of the shares they hold in any of the above-named companies. I will duly register them as I receive them, with the view of carrying out the following arrangement:—For the sake of clear explanation, I will assume that 200,000 shares are thus registered. To each of these registered shares I would issue scrip, representing a paid-up share of £1 in the Turon Ridge property—each of these to be inseparable from, and attached to, the share in the former companies,—these shares would then represent a capital of 200,000*l.*, assuming them at the full value. This arrangement complete, the shareholders to appoint such management as their past experience would dictate. These directors to be authorised to make a call sufficient to apply means to test the true value of the vein: say that this call is 1s. on each share, a working capital of 10,000*l.* would be in hand. This applied, the Turon Ridge shareholders would stand precisely in the position that the shareholders of the Great Nugget Company now stand in,—namely, that each share is considered worth 15s.; consequently, by the call of 1s. per share, a property would be established that, according to actually present prices, might be estimated at 150,000*l.*

The risk is so small, and the result appears to offer so great a chance of success, that I determined to place it before the experienced judgment of such men as Mr. Guedalla and Mr. Evan Hopkins, who will, doubtless, be at once able to suggest many improvements to these rough suggestions. Much good may be the result; the consideration of my proposal can do no harm. I have been at some small expense in taking up the lease, &c., and I am quite willing to take my chance with others upon any amount that may be considered equitable. Success following these suggestions, I shall, indeed, rejoice that it has fallen to my lot to make them. I shall be happy to attend to any communication addressed to me on the above subject.

*South-street, Dorking, Oct. 25.* JAMES M'ARTHUR.

## THE GREAT NUGGET VEIN COMPANY.

SIR,—I acknowledge that any explanation of what Mr. Guedalla's figures appear so clearly to expose is quite beyond my power, and, indeed, beyond any feeling of personal interest, except the general expression of a hope that those who have the means may offer such explanations as may clear themselves from the censure that must till then hang over these transactions. I was not aware, before the perusal of Mr. Guedalla's letter, that the Great Nugget Company had thus competed with the English companies in an unenviable field of notoriety. In tracing the energetic proceedings of their manager, Mr. Spence, the interest I felt, doubtless, led me to form favourable conclusions of their progress as a mining company. Of their transactions as sharebrokers I know nothing. There is one fact that, I think, is tolerably well established—that it is the transactions in the share market which have cast all the present depression over this interesting subject. All who feel any interest in the colony must acknowledge the exertions that Mr. Guedalla has made towards the cleansing of this Augean stable.—*South-street, Dorking, Oct. 25.* JAMES M'ARTHUR.

## NOUVEAU MONDE MINING COMPANY.

SIR,—We have noticed some remarks in your last Journal, by Mr. Clement, upon our conduct towards himself in connection with this concern. We must decline to enter into a controversy with him, but would state that his letters, reports, &c., were read by us *verbatim* to the committee of supervision in London, and copied and sent to Paris word for word.

For the perusal of the shareholders at large, and for publication in the newspapers, we extracted every fact which the letters contained; but Mr. Clement's letters were frequently so full of personal matters, and of remarks upon the affairs of other companies, that it was impossible to publish them *verbatim*.

However, his letters to us, and press copies of our letters to him, are open to the inspection of any shareholder at any time; and nothing could gratify us so much as that our instructions, advice, and warnings, to Mr. Clement, should be read and known by the shareholders.

A report upon the company's affairs, with statements of accounts, and with extracts from the correspondence, will be issued to the shareholders in the course of a few days, and they will then be able to judge whether he is, or we are, deserving of blame.—*London, Oct. 27.* JOHN TAYLOR AND SONS.

## MINING IN CALIFORNIA—CARSONS CREEK.

SIR,—I am indeed sorry to see in your Journal of the 24th June last an article, depreciating the Californian gold regions, and more particularly the rich neighbourhood of Carsons Creek, in which the writer, Mr. H. Weekes, seems to me to be wrong in almost every point, and but from unwillingness to accuse the gentleman of falsehood, I should be ready to say that he had never been in California. It is evident, however, that he has had nothing but inaccurate maps for his guidance. Cook, if I mistake not, mentions in his *Geography* respecting California, that there were no mines worth working. Now, Mr. Weekes, like Dr. Cook, never could have visited Carsons Creek, to ascertain if there were any mines worth having or not.

Your correspondent may be more acquainted with the people of California than myself, and may have been got the better of by their great tact in bargain making; but he has no knowledge of mining, nor of the locality of Carsons Creek, although he attempted to describe the place. Mr. Weekes should have described the place as it is—one of the most healthy spots in California, a good wintering place; and that the heaviest machinery used in Californian mines, which is also alluded to, can be brought in wagons, similar to those used in London streets, to within half a mile of the summit of Carsons Hill, where, as a matter of course, machinery would not be required, but lower down, where water-power can be brought to bear.

We all know, I suppose, that there is great risk in almost every description of mining operations, but it would not be so much of a speculation at Carsons Creek as at many other places. I have worked in the most extensive and richest mines in Cornwall, and have had much experience in gold mining, and never yet have I seen a place of so great promise as Carsons Creek (properly, Carsons Hill). Whether the directors of the Carsons Creek Mining Company may succeed in procuring a legal right to a sufficient surface necessary to the development of the mine has to be yet proved; but they may not be so unfortunate as the Mariposa Company. It should be borne in mind, however, that every man's mining or other ground in California is his little kingdom, having as much right to it as Queen Victoria has to Buckingham Palace; and in many cases the miners are unwilling to be without their claims at almost any price.

But the great source of failure in Californian mining is in the direction of the operations generally. I have no desire to disparage gentlemen holding responsible situations, but the Admiralty would have as much right to expect success by placing a Cornish miner in command of the Baltic fleet, as the London directors would have to look for beneficial results by appointing gentlemen from their offices to take the direction of their gold mining operations. I have particularly examined, over and over again, all the mining claims at Carsons Creek, and have taken samples, with the permission of the proprietors, from different places, from which some estimate of the value of the mine can be ascertained; but as those able gentlemen, Mr. Carrington and Mr. Inch, have examined the property on behalf of the directors, there need not be much more said here on this head. Still, I would add, that if the directors can succeed in obtaining a legal right to the whole of Carsons Hill, and commence operations with practical mining engineers, there need not be the slightest doubt of their success. A DIGGER.

*Carsons Creek, Calavaras County, California, Aug. 26.*

P.S. Mr. Weekes is right in one point—that is as to the comfort in California. It is true there are many, particularly the English, who have no homes here; and the foreign miners' tax collector is after an Englishman for his four dollars per month, like a spider after a fly for his breakfast.

## THE PORT PHILLIP GOLD COMPANY.

SIR,—If the shareholders, and Mr. Michel, intend calling a meeting to investigate the affairs of this company, and reorganise it, the sooner they do it the better, and put a stop to so many inuendos and unpleasant remarks. I have done with the company, and I do not wish to have my name connected with it any more, unless it be to give evidence to clear up the mystery attending the proceedings at the commencement. Had the shareholders adjourned the meeting held in January last until my arrival, the whole affair would have been cleared up before this, and I should have been able to correct some of the evils, and also the misrepresentations contained in the report alluded to. I have already stated that after my departure from London a Mr. Ritchie obtained the full and unqualified power over the whole of the company's affairs. He arrived in the colony three months after me, with all the men and funds placed entirely at his disposal. Not a line written to me; all the official correspondence was kept strictly private from me. Therefore, I repeat, I was completely put aside after my departure from London.

Notwithstanding all this, mortified, as I was, at such proceedings, I assisted Mr. Ritchie, and placed a certain number of men on tribute, to reduce the cost of maintenance, and recommended him to discharge all the rest, as they could not be employed to advantage at that period. At the beginning of November, when Mr. Ritchie was just settling down, Mr. Bland arrived, with not only all the powers to discharge and supersede Mr. Ritchie as the superintendent, but to assume the post of a resident director. He brought no advices for me from the directors, nor was he made acquainted that such a person was in the colony. As he only knew Mr. Ritchie as the agent of the company, and not me, he desired I should no longer be in communication with the Government on behalf of the company. Consequently, from that moment (December, 1852) I refrained (with the exception of setting the last tribute at Fryer's Creek, and establishing the melting and assaying offices) from taking any leading part in the company's affairs. All the official correspondence has been kept throughout as secret; and, consequently, my name should not have been so used in London.

Therefore, as these questions are so easily explained and proved, I think the wiser plan would be to copy all my official letters, reports, and minutes, which are in my possession, and compare their contents with what have been inserted by the managers in the *Times*, &c., after my departure. This will at once place things in their proper and just light, and the cause of so much trouble, misrepresentation, &c., be placed on the right shoulders. It is true that the gold-purchasing business is past—indeed, it was passing before I left the colony; therefore, unless something else is available immediately, the steps to be taken are quite evident.

If Mr. Michel can aid in the restoration of the company, I think his views, at least, should be considered in determining the final arrangements. I willingly forgive Mr. Michel's errors and mistaken views regarding me in connection with the company, and I would advise him, before he leaves for the colony, to be careful in the formation of his company. Sir Charles Hotham has declared that he will not give the least encouragement to jobbing companies, and that he will only support legitimate mining amongst the industrious classes of the colony. A friend of mine left Bendigo on the 25th July last, and tells me that they are employing the Chinese there in the same manner as we employ the Negroes in South America—to work the refuse on tribute, &c. They can live cheaper than Europeans; therefore, they are able to work on poorer stuff. I do not understand how this can annihilate my statements.

*Oct. 24.* EVAN HOPKINS.

## CRADDOCK'S ENGINES.

SIR,—Experience has long convinced me that, if I could not, by perseverance, surmount all the obstructions which vested interests could bring to bear against me, it was in vain to look for help from any other quarter. Hence the reason why I have been silent for a length of time—and, indeed, intended to remain so, had not my adversaries deemed it expedient to change their tactics, and attack me openly. To convince men against their will and interests, it is useless to accumulate evidence, and to announce it publicly. I have, therefore, of late, directed all my energies, not only to inventing, but to the bringing all the manufacturing and practical details to a degree of perfection and simplicity which, although it might not shame my opponents into a more patriotic, humane, or honest course, I can assert that it has some influence with the general public, and perhaps may open the eyes of the Government at this critical time, and cause them to consider what can be done with steam, in relation to cost and weight of coal, bulk and weight of engines and boilers, safety from explosion and rupture from shot.

My business, in this letter, is to address myself to neutrals, among whom, from his letter, which appeared in your last Journal, I suppose I must at present class Mr. David Mushet. When Mr. Mushet has reflected upon Mr. Bennetts's data and inferences, he will, I doubt not, estimate them at their true value. Mr. Bennetts first tells us that the valves and boiler leak badly. Such being the case, every acute and candid investigator would have come to the conclusion that all data founded upon such a state of things were utterly valueless to show the effect of the steam in doing work, or the boiler in evaporating it. But further, no impartial investigator would ever attempt to injure another party's interest in an invention of this kind, when he knew that only by the engine doing something like its 30-horse work, and working to a pressure something near to the 100 lbs., as was intended, could it give other than an unfair comparison, even if the boiler and engine had been in proper order. If this is the way we are to think and reason about such matters, then, Sir, your columns might as well continue to be occupied with gold schemes, as with a discussion on that useful thing, the steam-engine.

Enough, then, upon Mr. Bennetts's data, and his inferences. I must now revert to what Mr. Mushet says his individual opinion has always been—namely, that my single row of tube-boiler is not sufficient to absorb the heat from an adequate mass of fuel when continuous hard work is required from it. It is quite sufficient for all whose object is the truth to lay before them the simple facts as they are. In the boilers under notice there is an absorbing surface of 403 square feet, and the grate surface is nearly 8 feet. The coal consumed per hour is 67 lbs., which gives 8·4 lbs. of coal per square foot of grate per hour. The absorbing surface to the grate surface is as 1 to 50. These boilers are enclosed by a double flue; the gases pass, before going to the chimney, around what, even in the Cornish boiler, constitutes the outside brickwork. In this case, there are two of my boilers side by side, which, with their double flues, double brick casing, and ashpit, occupy a space represented by an 8-feet cube. On referring to a publication of no mean authority—I mean Mr. Fairbairn's paper, read before the British Association for the Advancement of Science, "On the Consumption of Fuel, and Prevention of Smoke"—we find him, after admitting the great value of large absorbing surface, and in another place pressing the importance of closely preserving the heat generated, giving instances of Cornish boilers having 33 square feet of absorbing surface for each foot of grate surface; and he evidently, from considerations of compactness, and the value of space in large towns, fixes upon 1 to 18 as the proportion he considers best for the kind of boilers he had under review.

I have ascertained the temperature of the products of combustion at their exit from the boiler, and find that they fluctuate from 400 to 600 degrees. The average, so far as I can ascertain, is about 500 degrees, as the thermometer shows a temperature for a much longer time below 500 degrees than above. The thermometer was graduated

up to 730 degrees, but no reliance could be placed upon it beyond 600. The steam at the time was from 100 lbs. to 105 lbs. above the atmospheric pressure; the temperature, therefore, would be 342 degrees. I should observe that, after the gases pass this point, they impart heat to the steam-chest, which presents 40 square feet of absorbing surface.

With these particulars before him, Mr. Mushet, and such others of your readers as desire to arrive at the truth, can reflect if the evaporative effect, great though it be, be more than such arrangements, when duly considered, are calculated to give, with the metal of the tubes but little above ⅛ inch thick, and no deposit to obstruct the heat passing to the water. Mr. Fairbairn, in the paper referred to, gives an instance of a Cornish boiler, with its 35 feet of absorbent surface for each foot of grate surface, evaporating 11½ lbs. of water with 1 lb. of coal. It is impossible (to use an expression of Mr. Fairbairn's) to "*concentrate*" the heat more than is done in these boilers, nor is it easy to conceive how to compel more of it to unite with the water to form steam. My other forms of boiler, it is true, give a greater surface in the same room, and, if anything will do it, they will; but I have made no trials with them that can warrant me in making statements.

The only other matter it is necessary for me to notice in Mr. Mushet's letter is his allusion to leaks in my boilers. The tubes in the boiler at the London works were brass, and two or three of them (as hundreds have done in the locomotive boilers) snapped asunder from contraction. I afterwards substituted iron for brass tubes; they did not snap asunder, but action was produced at the ferrule joint, which caused them to become leaky; this I effectually stopped in the same way a similar practical difficulty was met in my condenser, by giving a uniform bend, by a machine for the purpose, to the tube, and ever since a more perfectly satisfactory state of things could not be desired. Could we get all the tubes as good as most of them are, I can safely affirm that one set would last from seven to ten years; but from some cause, which the makers of tubes no doubt are better able to explain than I am, a tube will give way generally in the joinings of the metal or weld. I have had the same tubes at work constantly in boilers for seven years, during which time two gave way, and those that gave way (except in the very place), and the other tubes were as perfect as when put in; as, when the soot was cleared off, the draw plate marks clearly indicated the perfect state of the tubes. This is all I know about the tube part of my boiler. The chambers were composed for some time partly of cast and partly of wrought-iron. Those at Haytor Consols are all of wrought-iron. At the time those boilers were made I had not the means of making the riveted parts myself, and I could not get them made as they should be. I do not know where the leak is in the boilers at Haytor Consols, but I expect in these rivetted parts. These I now do at my own place, and I have no fear, if they put on a pressure of 1000 lbs. per inch, that they will leak or burst. As an inventor, I have found that if I could not find the means of making the things I have invented, I must in many cases have been content with the assertion that they could not be made, and in others they cannot be made any better. But after 17 years' thought, experience, and labour, Englishmen may rest assured that, if need be, I could, with the aid of the serfs of Russia, and Russian capital, do all I have ever said I could. At this critical period, Englishmen may take my word that it is worth the while of all who have not a vested interest in maintaining things as they are to enquire in a truthful manner what can be done with steam in the prosecution of the war. That vested interest should complacently sacrifice thousands of lives and millions of property will be no more than vested interest has done before, and will now, if it be allowed to do so.—*London, Oct.* 21. T. CRADDOCK.

## CRADDOCK'S ENGINE AT HAYTOR CONSOLS.

SIR,—In reply to Mr. Mushet, I beg to state that this engine was purchased by the company as a 40-horse engine; the cylinders are 8 and 22 in. diameter, with a 2-feet stroke; the condenser is surrounded with water, forced in at the bottom, and flowing over the top of the cistern. There are two boilers, with a single row of tubes in each. The leakage of the boiler has not been in the tubes, nor at their point of contact with the top and bottom chests, but in the seams of the bottom chest. The average pressure kept up in the boiler ranges from 30 to 50 lbs. per square inch. As to the leakage of the valves, they were perfect when started last October; my impression is, that the destruction of the valve is occasioned by the unequal and constantly varying pressure of the valve against the face. If I am rightly informed, this is the only engine Mr. Craddock has erected with two slide valves, his others having but one; if so, it will, perhaps, account for the result being so different.

My faith in Mr. Craddock's engine has never been so great as Mr. Mushet's. I never believed it would compete successfully with the Cornish engine for pumping; but I have looked upon these inventions most favourably, and have anticipated large reduction in the fuel consumed, as compared with the very best double-acting rotating engine, on the Bolton and Watt system, and have been correspondingly disappointed with the performance of the engine at Haytor.

If Mr. Craddock's experiments with his engine in London are correct, it is to be hoped that that gentleman will be induced to find out, and remove the cause or causes for the enormous consumption of coals in the Haytor engine. G. BENNETTS.
*Islington, Oct.* 25.

## CRADDOCK'S ENGINE AT HAYTOR CONSOLS.

SIR,—In reply to Mr. Craddock's letter in your Journal of the last week, I beg to state that I have neither time nor inclination to enter into a correspondence with that gentleman, through the medium of your columns, as regards the merits of his engines as a class. "Inquirer" asked for information relative to the performance of the engine at Haytor, as compared with the Cornish engine. That information I have furnished, confining myself to facts, as ascertained over a period of about 16 months' working of the engine.

I must, however, deny having had a hand in the management of the engine, from the time of its delivery on the mine to the present moment, any further that it became necessary for me to act, from time to time, as the manager of the mines.

The cylinders, valves, and some other parts of the engine, were delivered on the mine about the middle of November, 1852. They were at once unpacked, and all the light parts of the engine placed in the house; and every part that had been fitted was kept well greased. In about a month after the arrival of the engine, Mr. Craddock sent one of his men, from the factory, to commence fixing it; and from that time to this date the engine has been under that man's supervision, except from the 10th October, 1853, to the 20th January, 1854, when it was in the hands of the two men whom Mr. Craddock sent from London, as stated in his letter.

Mr. Craddock's belief that these men left because they could not agree with me, is not founded on fact. I carefully abstained from interfering with them, either directly or indirectly, and never spoke to either of them in terms of fault-finding but once, and then only when one of them persisted in keeping open the furnace-doors, as a means for keeping down the pressure of the steam, instead of closing the damper, which I told him I regarded as the most economical mode of proceeding.

As regards the use of oil, Mr. Craddock, whilst at the mine, set the example; and when, afterwards, I sometimes complained to the men that a very large quantity of oil was being consumed, the answer I got was, that Mr. Craddock had ordered them to use oil to the valves and pistons during the first few weeks of their working. But it must not be supposed that the quantity of oil spoken of was all used on the engine: a water-wheel and 24 stamps were supplied from the same source during that period.

I pass over the remarks made by Mr. Craddock on the data I have furnished, simply remarking, that any one disposed to question the accuracy of my statements may satisfy themselves by enquiring of the agent and engineers on the mine; and I believe any one desirous of testing the capabilities of the engine will find no difficulty in obtaining permission, on application to the proper quarter.

Mr. Craddock asks, "What would be duty of the Cornish engine, if, instead of working from 80 to 400-horse duty, they had been confined to this 1½-horse power, with no allowance made for three separate pumps, and all the gear-work?" In this question he betrays considerable ignorance of the power and performance of Cornish engines; and I would, therefore, inform him that there is not a pumping-engine of 400-horse power either in Devon or Cornwall. I find, from a six months' average of the monthly reports of 33 engines, that the average load was 12 lbs. per square inch on the piston. The engine recently erected at Wheal Vor, with a cylinder 100 inches diameter, and a stroke of 12 feet, working 10 strokes per minute, with a load of 12 lbs. per square inch, will give but 342·7-horse power:—

$$7854 \times 12 \times 10 \times 12 \div 33{,}000 = 342{\cdot}7\text{-horse power.}$$

Hocking and Loam's 85-inch engines, with a similar pressure, stroke, and speed, will give but $5674 \times 12 \times 10 \times 12 \div 33{,}000 = 247{\cdot}6$-horse power.

And I speak within bounds when I say, that the average speed of the Cornish engine does not exceed one-half the speed at which they can be driven; consequently, the average of the engines reported are not working at more than one-half of their nominal horse-power.

I find that the average duty for six months of Austen's engine at Fowey Consols, some years since, was 87,065,000 lbs., lifted 1 foot by consuming 1 bushel of coals, or 1,936,488 lbs., lifted 1 foot with 1 lb. of coals, being 1·9 lbs. of coals per horse-power per hour. This engine, which has an 80-inch cylinder with a 10-feet stroke, and is nominally—

$$5026 \times 12 \times 12 \times 10 \div 33{,}000 = 209{\cdot}2\text{-horse power,}$$

was at that time working with a load of about 11 lbs. per square inch. The number of strokes per minute is not reported, but I believe it was under 5 per minute; and, assuming it to have been but 5, the engine was really doing but—

$$5026 \times 11 \times 10 \times 5 \div 33{,}000 = 88{\cdot}7\text{-horse power.}$$

But I will furnish another example of an engine-working under circumstances more nearly allied to the Haytor engine. At the Silver Brook Mine they have a pumping-engine with a cylinder 20 inches diameter and 6 feet stroke; they have also a double-acting Bolton and Watt engine, with a cylinder 10 inches diameter and 2 feet stroke; one boiler supplies both these engines. The manager stated, at a meeting of the adventurers on the 18th inst., that these engines were performing their work with a consumption of 35 cwts. of coal per week. I visited the mine yesterday, to gather some further information relative to these engines, the following is the result. The pumping-engine has three lifts of pumps: viz., 1—11 fathoms 9½ inches, and 2—11 fathoms, each 8 inches diameter; two strokes per minute is the average speed requisite for keeping the water, and the engine requires about 20 cwts. of coal per week, or 1 bushel in 379 minutes. The duty performed is—load in pounds, $4894 \times 6 \times 2 \times 379 = 22{,}271{,}792$ lbs. lifted 1 ft. by a bushel of coals, or about 7½ lbs. per horse power per hour. The steam in this engine is cut off at half-stroke; had the steam been cut off at one-sixth, the consumption should be reduced to 4·5 lbs. per horse-power per hour. Even the double-acting Boulton and Watt engine, working without expansion, and which is idle more than half its time, is more economical than the Haytor engine. I am informed that they draw with this engine, on the average, 100 kibbles per day; the shaft is 40 fathoms deep; the quantity of coals consumed per day 2½ cwts.; the weight of kibble being about 10 cwts., this will give a consumption of about 20 lbs. per horse-power per hour.

Mr. Craddock, in another part of his letter, says, "he will, perhaps, further tell us how these engines are managed?" This I will do. In the first place, as a rule, the Cornish engineers do not get paid a considerable sum over and above the contract price for their engines, nor before they are delivered, and fixed, and at work on the mine, but are content to be paid for their work after it is done, and in conformity with the terms of their contract; neither do they abandon their engines to their fate after they have started them, nor consider it an "unbusiness-like" proceeding on their part to see that their engagements are carried out, and that their engines really do perform their work, and upon the terms agreed on. And it is not found necessary, for the good management and economical working of the Cornish engine to keep a regularly educated engineer, at a salary of 1*l.* 16*s.* per week, to superintend it. Any working man, with an ordinary amount of intelligence, after a few months' experience, being quite competent, and a monthly wages of from 3*l.* to 4*l.* ample remuneration for such services.

Mr. Craddock says "it is not easy to understand what Mr. Bennetts does mean, as in one place he says the engine requires 15 lbs. of steam to work itself." Mr. Craddock is not likely to understand what I mean, if he does not read more correctly than he quotes. What I wrote was, "that the lowest pressure at which the engine will work is about 15 lbs. above the atmosphere." I then went on to show that 95,076 in. of steam, at a pressure of 30 lbs., or twice that quantity at 15 lbs., was the actual quantity of steam measured into the engine whilst it consumed 1 lb. of coal; and that 4 lbs. of water would produce that quantity of steam, and to that statement I still adhere.

If Mr. Craddock can, as he says, with that "identical engine and boiler," do the work of 30 effective horse-power, "with a consumption of less than 3 lbs. per horse-power per hour," I put it to him whether, as a honourable man, he ought not at once to put the shareholders in possession of the secret by which this is to be done, for Mr. Craddock has doubtless not forgotten that the engine was sold by him to the company as a 40-horse engine; and whilst no expense was spared in having his orders carried out to the letter in the erection of the engine, that he has been paid for it a very considerable sum above the price at which he agreed to complete it.

The value of the statements of the men, "that they would engage to work the engine night and day, and Sundays, with 2 tons of coals per week," will appear from the following copy of the quantity of coals, &c., delivered on the mine from the 1st of Sept., 1853, to the 30th of April, 1854:—

| | | |
|---|---|---|
| 1853.—September 1 to November 30 | ..... | 90 wagon loads of peat. |
| | ..... | 10 tons 15 cwts. of coal. |
| December | ..... | 18 " 6 " " |
| 1854.—January | ..... | 11 " 0 " " |
| February | ..... | 15 " 14 " " |
| March | ..... | 18 " 3 " " |
| April | ..... | 12 " 15 " " |

The engine was idle about 10 days in Jan., but for which the consumption in that month would have been quite 15 tons. Thus, we have an average, for the five months the engine was consuming coals only, of 16 tons per month; from this must be deducted about 2 tons per month consumed in the counting-house and smiths' shop, and if the rest was not consumed in the engine I have no doubt that the committee of management will be prepared to remunerate "the men, who do not hesitate to declare that much of the coal charged to the engine never went into the furnace," if they will satisfactorily show to what use it has been applied.

In conclusion, I beg to state that, if Mr. Craddock is not satisfied with the examples I have given of the performance of Cornish pumping engines, he can have others on application; and when Mr. Craddock has really produced a steam-engine, working without let or hindrance (but such as is incidental to all engines), and to its full nominal power, with a consumption of only 3 lbs. of coal per horse power per hour, I will, if that gentleman will allow me, go and see that engine at my own expense, and publicly testify to its performance; until then he must excuse me if I say that, notwithstanding he speaks so positively as to what he can do, I must refuse to be convinced by the kind of evidence he adduces in support of his position.
*Islington, Oct.* 25. GEORGE BENNETTS.

## THE COPPER TRADE.

SIR,—I am glad again to see in use the pen of "A Miner" (Redruth), who, with much unnecessary vituperation, gives us wholesome truths at times. He heralds himself, rather inaptly, with Lord Byron's well-known pleonasm. I take it there is as much similarity in my friend, "A Miner" (Redruth) and Childe Harold, as in Prince Menschikoff and Alexander the Coppersmith.

There are, Sir, continued complaints made of the quality of the copper supplied; also of the defective character of sheathing, plates, &c. I can only repeat, there is no sound reason why this should exist, and that copper from every variety of its ores is capable of being made good, and adapted for its several purposes, by proper care and a little discrimination. It would not a little conduce to this if the men employed at the works were paid in some proportion to the manner in which they executed their work, instead of by the tonnage amount of the work done. Under the present system they have no inducement to excel, and the exercise of the mind of the working smelter is much the same as that of the Devonshire ploughman, who is nearly as ignorant of what he is about as the horses he drives, or the plough he holds.

I will instance again the depreciated ores of Devon Great Consols, which have been selling at such an enormous sacrifice of price, and which, I contend, are capable of making best copper, and economically so, although some anonymous scribe denies the fact; and I pledge myself to the performance of it, or will for ever hide my diminished head, and quickly, as deservedly, submit to the character of an idle braggart.

Of manufactured copper, I can only say that from bad copper you can only expect a defective article. It may be worthy of remark, that if not properly handled, and if injudiciously hammered, the best copper will fail. The art seems to lie in knowing, and being able to distinguish between, compression and expression. The first improves—the latter will destroy—the malleability of the best metal.
*5, Gray's Inn-square, Oct.* 23. THOMAS IRVING HILL.

## IRISH MINES.

SIR,—Your Dublin correspondent is sometimes like a true knight errant, for he has a dash at everybody, whether he differs from them or not. In your Journal of the 14th inst. he passes some severe strictures on two of the West Cork mines, and on a report which he considers to have been too favourable towards one of them. He then turns to the other, of which I happen to have reported decidedly unfavourably, so he cannot take me to task on the same score, but, it seems, must have a dash at me somehow, because I reported on the mine at all, I suppose; and so he is down on me for using some geological terms, which he considers too hard to be understood. Now, I really think he ought rather to be obliged to me when I import from "geology" to "mining" the term "anticlinal axis," instead of saying, "a bending over of the strata into a wave, or ridge-like roof of a house, or horse-shoe form," or using some such long-winded descriptive name; or, again, when I use the term "quartzite," instead of saying, "hard, compact quartz rock," or of adopting the Carbery miners' term, "elvan," which is decidedly incorrect.

Surely, Sir, he ought rather to thank me for such changes, than otherwise. And if he forgives the introduction of these terms, what exception can he take to the rest of the extract he makes from my report? For if it be a true description of the state of the case, I am sure he is the last person who would find fault with a mining engineer for endeavouring to lay down, as accurately as possible, the precise state of the case he is called to report on, so as to enable the shareholders, as far as may be, to judge what sort of mine they have got. It may be, however, that your correspondent has been on the ground, and thinks I have overdone my description; if so, I am quite willing to bow to his decision, and shall be glad to hear that he has a more favourable opinion of "the lode" than I have felt it my duty to express. But if he has not been there, and only doubts the applicability of my description; I shall be happy, if he will favour me with a call, to endeavour to show him that the extract is only a description of "facts," not capable, perhaps, of being put in very simple language. He is quite mistaken in supposing that the report was "prepared for the meeting," as my inspection of the mine took place previous to the August meeting, and by right I should have had the report there; but having, through accident, been able only to forward a short opinion then, the full report lay over for some time, through press of other business, quite accidentally. R. W. TOWNSEND.
2, *Henrietta-street, Dublin.*

## PRACTICAL MINING—CAPT. HEATH AND MR. ENNOR.

SIR,—I always read Mr. Ennor's letters with a great deal of pleasure, as there is generally something interesting and amusing in them; and having an hour to spare to-day, I beg to make a few remarks on some of his queries; but not to follow him through your columns. I must leave that to some one who has more time, and is a better scribe.

1. I never saw a north and south lode that was heaved many feet. There is no heave in that one at Lydford, or anything to cause it, except Mary Emma lode, which has no effect. I have traced that lode through Lydford to near Bridestowe; it is a north and south lode, 15° east.

2. I have seen large heaves in lodes which have very little mineral in them; and if I find it so on one side, I think it useless to look for it on the other. The more oblique the caunter crosses the east and west lode, the greater the heave. A lode at right angles seldom heaves it more than its width. The greatest I know of is at Wheal Franco—a left-handed heave, and, of course, the most difficult lode to find.

3. I have seen a great many continuous and productive lodes run 5 or 6 points north of east—Poldice, Wheal Maiden Consols, United Mines, and many others, which have been productive mines; but I think that is no rule for practicals, and I hope they will not be guided by it.

4. I am not aware there is any tin near the rich copper lodes in Ireland, or that there is any tin on the back of the lode in the Devon Great Consols. I have searched the lode for it, without being able to find any; and no doubt I might find many more. Drake Walls is about a mile from that, but the River Tamar is between; and if there was anything impure in it, I think the salmon would not go to the wear head to spawn. From my experience, I find where copper lodes make tin on the backs they are generally deep and lasting mines.

5. Wheal Vor tin lode runs south of east, and Poldice north; and I think we may find many others.

6. Most of the productive mines in Cornwall and Devon are bordering on the granite; but there is a beautiful mineralised spot near Stowry in the sandstone, and which I have no doubt will be a great mining country by-and-bye; I mention this as an exception from the general rule.

7. No: there may be silver, which I have found in Poldice.

8. Most of the lead lodes I have seen are running between north and east. East Wheal Rose, and the mines around Newlyn you speak of, seem to be lodes in a span of ground peculiar to itself—never yielding more than ½ ton of lead to the fathom of ground, which was taken away at a trifling expense. At Pencorse, there is a cross-course, which appears to change the same lode from lead into copper.

9. I have never seen a north and south lode heave an elvan out of its direction, nor have I seen an east and west lode do so; generally speaking, they run parallel with each other.

10. The most productive lead lodes I have seen underlay west, and the shoots dip north. The most productive copper lodes underlay north, although I have seen rich lodes underlay south both for tin and copper also. At Poldice, there are two lodes, having two distinct backs; one contained tin and iron, and what is termed by the old men "a scovan lode," underlaying south. The other had a fine light gossan, richly quartzoed, underlaying north. In the 48 fm. level, those lodes crossed each other; after which the south underlayer became rich for tin and copper also; I should state here the north underlayer improved in the same proportion.

11. I have seen lead lodes, the shoots of which run with the stratum, and dip with the same angle of clevage; but they are not always remunerative.
*Lydford, Oct.* 24. W. HEATH.

SIR,—Availing myself of a little leisure, I beg a small space more, to put a few mining questions to the public:—

1. If the magnetic current carries the minerals through the east and west lodes, why are not the north and south lodes filled with the same minerals?

2. Will any one of your readers tell me at what distance the Wheal Franco lode began to change its direction, to make that heave—say it was 100 fms. At a given point that lode came back on the other side, so as to be in the same direction as it was before it began to make the heave.

3. Will a heave make a lode longer?

4. Has any one seen a lode thrown up by a slide, so as to show two distinct backs at the surface?

5. Which lode is most likely to be cropped out, or die a natural death—a lode that is 5° north of east, or one 35° south?

6. Pencorse is an east and west lode, and supposed to be that of East Wheal Rose—has the cross-course the virtue of changing that lead into copper?

7. I have seen a lime rock run parallel with a lode at the same distance, similar to that of an elvan course. Would the former have a better effect than the latter?

8. Did the copper I speak of at Poldice run from the north into the south lode? If so, what became of the north one? It appears they both were fed. Where did they get their supply from? I never saw a rich copper and lead lode intersect each other, and continue so for more than 6 ft. If it is a pure white killas, the copper generally destroys the lead, but not so with tin; but if the killas is blue, lead generally masters.

In conclusion, give me a copper or tin lode, as near to east as possible, I do not care what its bearing is, north or south (of course, I like to see a good constitution, such as a light quartzose gossan, and a little carbonate in it will be better), sink on such a lode, if you have sufficient capital, down to the antipodes before giving it up. By way of illustration, I will give you one instance. At Wheal Unity, on Messer lode, they sunk 60 fms. through gossan of that description, when they met with greens for 10 fms. more, which gave them 2*l.* 10*s.* per ton; after which, every shareholder made his fortune on rich grey ores, which brought 30*l.* per ton. Perhaps some one of your readers can tell the profits realised?

Many people are apt to say too much in favour of the locality they have had the most experience in, but the stratum which is a good mineral bearer in one locality is not always so in another, and an experienced man finds himself sometimes at a loss, and would probably make an error in his report, if he did not find some one to answer his questions. I know of a rich copper lode in Wicklow, cut out in sinking by a lime rock. Who knows but what, if they continue sinking on the same angle, they may find the lode as good, or even better than it was over the lime. Similar to that lode is one at Carn Brea, which was cut out by a bed of granite by the former company, and made such immense returns to the present company below.

I have seen some good stones of lead from beds, or floors, from South Tawton Lime Quarry. From the manner in which they were found, I should not think it worth while to go to see them, even if they were better, feeling, as I did, it was not worth prosecuting. About a month since I was in Yorkshire, where there was a rich lead mine in lime rock, just as I have described before, in floors or beds. The mine is divided in 18 parts or shares, between six individuals, making large dividends every month. Sd much for localities. W. HEATH.
*Lydford, Oct.* 24.

## ENNOR'S VIEWS ON THE IGNEOUS THEORY, AND THE EARTH'S NATURAL LAWS.

SIR,—Having read Mr. Ennor's papers on this subject with attention, I beg to say that, in my opinion, he has fallen into a very serious error, in stating the granite east of Liskeard and Linkinghorne to be cut off by Caradon Wood cross lode. Now, the fact is, the granite of the Caradon district does not extend so far east as Caradon Wood Mine by more than 1½ mile; and there are other cross lodes of considerable magnitude very far west of Caradon Wood, and altogether in slate, which, according to my notion, have had quite as much effect in cutting off the said granite as the Caradon Wood cross lode, if either have had anything to do in producing so great a change, which is very questionable. I would beg further to remark, and ask Mr. Ennor what part of Nature's laws induced him to state, through your valuable Journal (about three years ago, I think), the course of ore in Phœnix Mine to be very short, and not likely to continue long, and almost ever since they have been selling, bi-monthly, nearly 500 tons of rich ore, and the mine now looking first-rate, and likely to continue prosperous for a very long time to come?

Again, what portion of Nature's laws did he judge from, when he said that one swallow on Hingston Down would not make a summer? inferring that one or two samplings might be found there, but that would be just the extent of it. I need not, of course, tell you, Sir, that at Hingston Down their samplings are 300 tons monthly, no small quantity of ore from a mine only 75 fathoms below the surface. I cannot follow Mr. Ennor through the other districts, not having had an opportunity of visiting any neighbourhood but the Caradon, and about Callington; but I much wish to see Mr. Ennor's explanation of the above questions, that I may be the better able to understand the remarks which are contained in his papers on this subject.
*Oct.* 25. A RESIDENT IN THE CARADON DISTRICT.

## WESTMINSTER IMPROVEMENT BONDS.

SIR,—The fall still continues, for the bonds of 1000*l.* are now offered at 565*l.*, and there is no saying how low they may go. The only remedy of the holder in case of non-payment is against the property held by the commissioners, which I consider at present of very uncertain value. It appears, by the *Journal of Auctions*, that these bonds thus originated: By a number of Acts of Parliament of the present reign, some public, and others local and personal, the Commissioners of Woods and Forests were authorised to raise large sums for metropolitan improvements, including 39,000*l.* for improvements in and near Victoria-street, Westminster, to be paid to the Westminster Improvement Commissioners, when 75,000*l.* was expended by them. The commissioners were a small party of gentlemen who gave bonds to the Woods and Forests to carry out the improvements to a certain extent, being authorised in return to retain for their own use any surplus that might remain after the improvements were completed. The Acts empowered them to acquire considerable property, and to make two new streets with houses. The property taken was valued at the rental of 1845. The commission was to pay rates, to make good to the parish the deficiency until the new property to be built by them should pay, and then the parish is to pay the commission the excess of rates received in respect of the new property over the old until the parish has paid 30,000*l.* and interest. The Acts empower the commissioners to borrow money at interest, but expressly exempt them from personal liability, and make the securities available only against the property vested in the commissioners under the Acts. They have accordingly borrowed large sums, which they have expended in purchasing property, building houses, and laying out streets, and the bonds in question represent the money so borrowed. The above explanation shows the necessity of minute inquiry before investing money. The public supposed they were amply secured on real property, but, now there is even doubts entertained if the interest is secure. As for the principal being paid when due, it is all moonshine, as the price denotes. Why do not the commissioners vouchsafe an explanation in your Journal? I have asked for information on several important points, and my questions are passed over unheeded. Before next session, I trust the holders will meet and petition the House of Commons.—*King's Arms-yard, Oct.* 25. H. GURDALLA.

MINING ENTERPRISE IN IRELAND.—Our attention has been directed to an article in the *Nenagh Guardian*, on the much-to-be-deplored position, at the present moment, of the working miners employed by the General Mining Company for Ireland, at the Shallee Works. In that article allusion is courteously made to the remarks of our Dublin correspondent, in last week's Journal, in which it was stated, as it now appears erroneously, that "the proceedings terminated in an order for the payment of the men, the directors or agent being cast in open court." Ardently, we are sure, with ourselves, does our Dublin correspondent desire to witness the full employment of the mining population, not only connected with this company, but of those in all the mineral districts of Ireland, and that such employment should secure to them competence and contentment: however, in this case, it appears that he has been misled, from whatever source the information was obtained, and we are most happy to be able to give a correct version of the affair, and to show that the directors have done all that gentlemen engaged in commercial pursuits could be expected to do to ameliorate the condition of the men in their employ. From the evidence sworn to, and corroborated, by Sir James Murray, chairman of the company, Capt. Hamby, superintendent, and other officials, it appears that an organised conspiracy existed among the men. Some time since, from some cause or other, the body of men became indebted to the company in the large sum of 1500*l.*; these arrears were forgiven, and the men commenced work anew, in future to be paid monthly, in money, instead of meal, as adopted by the dismissed manager, each man to receive 5*s.* per week, as subsist, for which liberal arrangement they expressed much gratitude. When, however, the first settling day came, they unanimously refused to allow the deduction of the money thus advanced. The directors very justly resisted this attempted imposition, and the consequence was a large number of summonses against the directors. On hearing the cases, the magistrates, both at Nenagh and Newport Petty Sessions, were unanimous in dismissing the summonses in every case, and in expressing their indignation at the turpitude and ingratitude of the men. This strike has reduced the outlay of the company from 1000*l.* to 400*l.* per month, to the injury of the misguided men and their families. We are happy to find, however, that no great detriment will be felt by the company, as a large number of young persons, of both sexes, are employed in picking and washing refuse ore, which has accumulated at surface during the past ten years, and which will employ them for at least six months to come. We may add, that no one will be more gratified than our Dublin correspondent to record the future successful progress of this company's operations; and, indeed, his only desire is to forward the best interests of Ireland, by promoting legitimate enterprise, as shown by his constantly-mentioned regret at having so often to remark on the impediments to that end, in defective management of undertakings in which English capital is embarked.

COPPER ORE IN CHESHIRE.—On the estate of Sir John Grey Egerton, Bart., in the Bickerton Hills, a valuable deposit of copper ore is supposed to exist, and which is said to have been first discovered and explored by a German, named Branshagen, in 1697. From copies, which we have now before us, of some reports from him of that date, it appears that several pits had been sunk, and shallow investigations made, even before his time. He states that the ore generally consists of copper and lead mixed, but the quality or per centage he could not tell until he had "examined it with fire and water." He says, however, "the ore may be divided into three sorts—rich ore, which is as good as can be wished, middle ore, and common ore, which may be separated from each other to great advantage." From his reports generally, we may assume his opinion to have been that the veins would improve in richness in depth; and this opinion appears to have been borne out by after inspection, which was made in 1807, when Sir John Grey Egerton was induced to make a trial, first employing Mr. Accum, the mineralogist and chemist, of Compton-street, Soho, to make an examination, who gave his opinion that a valuable mine existed in depth. By the aid of a friend in Cornwall, Sir John obtained the services of an experienced miner from that county to give the ground a fair trial. He recommended that no further expense should be incurred in petty explorations, but to form a company, with a large capital, sink a proper sized shaft, and drive from a certain depth, were the best indications should present themselves, right through the hill. He felt perfectly convinced there was a large deposit of ore in depth, and that a valuable copper mine was in existence. The hill in question is three miles from the Ellesmere Canal, with the advantage of an easy descent. The Cornishman became ill and died, and the project was for the time abandoned.

SLATE QUARRIES IN NEW YORK.—The production of that useful mineral, slate, in the United States has been hitherto almost confined to the State of Vermont, where very extensive beds have been worked, and valuable quarries are still in operation, which have been noticed by us in a former Number; but from the great inconvenience arising from the cost of transport to New York and the northern States, it became highly desirable to ascertain if this material could not be found in other parts of the Union. Mr. Reed, of New York, who is connected with some of the Vermont quarries, in the summer of 1853 commenced a regular system of exploration; and his exertions were rewarded by the discovery at Peck's Hill, 40 miles up the Hudson River, of a vein of slate of great extent; and having obtained the assistance of Mr. Samuel Richardson, that gentleman visited and made a short report on its quality and value, preparatory to a more extended inspection and more elaborate details. The rock consists of a regular vein of beautiful blue slate, 300 ft. thick, bearing 30° north-east, nearly vertical in position, and finely laminated. From the surface appearance, Mr. Richardson considers it likely to prove a valuable property. It is most admirably situated for working—being by the side of the river, where vessels may come alongside the jetty, and load with the greatest facility. It is an outcropping vein, and, consequently, there is no overburden to remove. It is probable that good roofing slate may be made before they are down 20 ft. in the vein below the road. On the top there is evidence of a regular foot joint; and should the next joint be within 10 or 15 ft., and the heading regular, it will turn out profitable.

CAUSE OF THE NEWCASTLE EXPLOSION.—Mr. Pattinson, an eminent chemist, in the presence of Captain Ducane, of the Royal Engineers, Mr. Favell (the coroner), the foreman of the Gateshead jury, and some other gentlemen, performed some comparative experiments with gunpowder, and with nitrate of soda, sulphur, and charcoal, on Monday evening, at Newcastle. Nitre, sulphur, and charcoal being set on fire, a small quantity of water was introduced, and there was, in a few seconds, a violent explosion. This experiment was several times repeated. An equivalent quantity of gunpowder was then exploded with a fuse, and the noise was much fainter, being a mere puff in comparison. There is likely to be some difficulty in regard to the insurances, several of the companies having declared that they are not liable to compensate for damage occasioned by explosion. The authorities at the Home-office have intimated to the coroner presiding over the Gateshead inquest that Prof. Taylor, of King's College, has been instructed by them to proceed to Newcastle, and give evidence as to the cause of the explosion.

The Carmarthen and Cardigan Railway have convened the first ordinary general meeting, to be held at Carmarthen, on Monday, the 6th November.

## GOLD DEPOSITS IN GREAT BRITAIN.

BY SIR RODERICK IMPEY MURCHISON.

In the lower Silurian rocks, about 10 miles west of Llandovery, at a spot called Gogofan, near Pumpsaint, large veinstones of quartz in slaty masses were cut into by the Romans, who excavated lofty galleries, which are still open. That enterprising people evidently derived gold from the portions of the veinstones in which much sulphuret of iron is diffused, since many gold ornaments have been found at the adjacent Roman station of Cynffi-Cayo, with traces of former aqueducts, probably to convey water to wash the gold. Even the stones and troughs used in grinding the hard matrix are yet visible. In North Wales, where similar but older strata have been more crystallised, and infinitely more penetrated by igneous rocks, gold has not only been obtained in ancient times, but is still found to a certain extent. In Merionethshire some of the older slaty rocks were ten years ago announced to be auriferous by Mr. A. Dean. The district then referred to, which lies to the north of Dolgelly, and to the north and west of the small River Mowddach, has lately been re-surveyed by Prof. Ramsey, who has described the precise geological relations and mineral character of several metalliferous lodes, which though poor in lead and copper, are, more or less, impregnated with gold. The lodes are subordinate to the Lingula flags or lowest Silurian of the Government surveyors, and these slaty and arenaceous rocks being there traversed by trap dykes (including magnetic greenstone), and being also bounded by a large mass of eruptive rock, are much altered, and often in a talcose and chloritic state, with veins of quartz and much disseminated iron pyrites. The principal localities where the gold has been most observed are Cwmeisen-isaf and Dol-y-frwynog. One of the veinstones at the latter place consists of white saccharoid quartz, in some of which small flakes of gold are distinctly visable to the naked eye. Prof. Ansted, who has examined the same gold veins in situ, has reported to me that, at Dolfrewynog, the gold is disseminated both in grains and in irregular bands or veins, parallel to the lower Silurian schists, and contiguous to a poor lode of copper ore; the ores bands, he says, are made up of numerous threads of quartz and sulphate of barytes, which, besides the grains and flakes of gold, contain crystals of galena and copper pyrites. The gold is partially present to such an extent, he adds, that in a small quantity removed by himself from one of the threads or thin veins, and richer specimens have since been found, the proportion, upon analysis, was that of 60 ozs. to the ton. At a few places in Cornwall and Devonshire gold has been long known to exist in small quantities, both in the matrix of mineral lodes and occasionally in accumulations of rolled materials. One of the spots which now promises, as is said, to be most productive, is the Poltimore Mine, near North Molton, Devon, where certain schists of the age of the uppermost Devonian or lowest carboniferous strata, are mineralised to some extent, and were formerly worked for copper. There, the matrix or gossan of the lode is suffused by particles of gold, but so minute as to be for the most part invisible to the naked eye. If this condition be found persistent throughout considerable masses of rock, the proprietors may doubtless derive considerable profit from such mines; particularly when the gold-bearing matrix is friable. On the other hand, the Cornish coarse, ancient alluvia or gravel, from whence the tin ore has been extracted, as well as other portions of drift in that county, have afforded small portions of gold; but although some of the largest fragments have been, though very rarely, of the size of a pigeon's egg, none of these superficial accumulations have been considered worthy of exploration. In Scotland, whilst slender traces only of gold have been perceived in the older crystalline rocks of the northern highlands, the metal was formerly found in the slates of the south of Scotland, (lead hills), which, like those of the North and South Wales, are of lower Silurian age. There, again, it is in a region where the strata have been much penetrated by porphyries and other igneous rocks. The south Scottish gold mines, after affording a small sum, in the reign of James V., were, however, abandoned as soon as the cost of production exceeded the value of the ore extracted. In Ireland we read the same lesson. It is from the altered lower Silurian schists of Wicklow, which clasp round the eruptive granite of Croghan-Kinshela traversed by hornblende greenstones, that the gold in Ireland has been derived, and is occasionally picked up in fragments which have been detached from the sides of the mountain, or are washed down by the rivulets which descend from the hill. Now, if any portion of these old slaty British rocks, or their associated eruptive rocks, had been largely penetrated by gold, then most assuredly much more auriferous debris would have been recognised in the local adjacent gravel; just as it occurs in all really rich gold-bearing lands. But, as no rich auriferous sand or gravel is known in any part of the British Isles, we may rest satisfied that in our own country, as in many others, the quantity of gold originally imparted to the rocks was small and has, to a great extent, been exhausted. Even in Bohemia, which produced so much gold in the middle ages, and where the Silurian strata are penetrated by many igneous rocks, and in parts much metamorphosed, there are now no gold works, though other ores, copper, &c., are profitably extracted; and, just as in the rocky and mountainous tracts of Britain, very few places only can be cited which were auriferous. The Fleuringerwald and some chains of central Germany, also anciently afforded a little gold in rare and widely separated localities; but these regions, as well as the Peninsula and its golden Tagus, so auriferous in the classical era, have long since ceased to offer any notable quantity of the metal.

THE GOLD FIELDS OF AUSTRALIA.—The clipper ship, *Lightning*, arrived at Liverpool on Monday, after one of the finest passages recorded in the history of navigation, having made the run from Melbourne to Liverpool in 63 days. By this arrival we have advices from Melbourne to the 20th Aug., Sydney to the 7th, Adelaide to the 3d, Hobart Town to the 15th, and Launceston to the 16th of August. The *Lightning* has brought on freight 40,000 ozs. of gold, of the value of 160,000*l*. The *Sandy* has also arrived from Sydney with 12,576 ozs. of gold and 20,000*l*. in sovereigns, together 70,304*l*., making the total arrivals this week of the value of 230,304*l*., independent of the amount brought by passengers. The diggings generally are reported at present as rather inactive. The unusually dry weather evidently telling, in a very great degree, against the general yield of gold. Tarrangower, on the Bendigo quarter, was attracting attention, and several parties were making lucky hits. A report was current that copper had been discovered in the neighbourhood of Melbourne. The Melbourne *Gold Circular* of the 19th of Aug. states "That gold still remains in Melbourne at 4*l*. per oz., but the price has been falling during the last week at the diggings till it has arrived at 79s. 9d. This has had the effect of bringing a little more gold to Melbourne for sale than we have had for a few weeks past. The Avoca fields are turning out handsomely, nearly 12,000 ozs. having arrived by escort, and from Mount William diggings (Maryborough) we have nearly 400 ozs. This, coupled with the fact of over 39,000 ozs. as the total gold exported, is exceedingly encouraging in these dull times." The Geelong *Gold Circular* states "That the price of gold remains at 81s. to 81s. 8d. The quantity arriving in town by hand was very little." The arrival by escort was—from Alexander and Bendigo, 23,426 ozs.; from Ballarat to Geelong, 4600 ozs. Gold shipped from Melbourne to close of week, 1,336,507 ozs. 15 dwts. 6grs. At a meeting of the Wentworth Gold Field Company, on the 29th July, the report, which was generally favourable, stated that one of Berdan's quartz crushing machines had been ordered in London for the company. Some earth, which had been tested, yielded at the rate of 272 ozs. 14 dwts. to the ton. Messrs. Wentworth, Witt, and Laranch, had been authorised to act as the company's agents in London. By these despatches the following vessels are reported to have sailed from Melbourne—viz., The *John Banks*, 15th August, with 3000 ozs. on freight, the *Frances Henty* on the 15th, with 33,876 ozs. and 4400*l*. in sovereigns, and the *Mermaid*, the same day, with 2,000 ozs. of gold. These vessels have, consequently, an aggregate freight in gold of about 232,000*l*.

Mr. Walter Buchanan, of Cable-street, Liverpool, has a monster nugget of gold, weighing not less than 338 ounces, and of the value of 1400*l*., which he received by the last arrival from Melbourne.

A FACT, FOR THE ADELAIDE LAND COMPANY SHAREHOLDERS TO REFLECT UPON.—In the early days of South Australia the land put up for sale was sold at 12s. the acre; and by the then rules the purchaser of a town acre was entitled to an acre in some surburban allotment. One of the purchasers of such a brace of acres held his land for a year or two, when he sold it for 400*l*. At the end of a few years this purchaser sold his country section for 500*l*.; and within a few more years the town acre for 1200*l*. This last was re-sold, after a lapse of three or four years, for 8000*l*. Not long since three-fourths of this acre have been disposed of for 18,000*l*., and the remaining one-fourth is now about to change hands at the rate of 32,000*l*. per acre. This land, though in the best situation in Adelaide, has not yet been built on.

INCREASING APPLICATION OF PORTABLE POWER.—In our Journal of last Saturday we directed the attention of our readers to the great progress which is now making in the portable power system, and we referred to numerous localities in the United Kingdom where the engines might be seen in operation, and tested as to power, efficiency, and comparative economy. We have since then received a communication, from which it appears that not only in Great Britain, but in almost all parts of the world, in Europe, Asia, North and South America, and Australia, these engines have found their way, and are working for every variety of purpose, with the most satisfactory results. The patentees, Messrs. Medwin and Hall, have lately sent out six engines to South Australia, varying in power from 8 to 14-horses; they are for mining purposes generally, and two others of 12-horse power have been forwarded to Moreton Bay, North-west Australia; one 10-horse power to Van Diemen's Land, for dredging; two 12-horse power to New Zealand, for sawing down timber in the forests; one 10-horse power to the Brazils, for driving lift stamps, and other mining purposes; two 12-horse power to California, also for mining purposes; one 25-horse power to Hudson's Bay, for sawing timber, &c.; two 12-horse power to Copenhagen, for dock work; one 12-horse power to the Imperial Austrian Government, and another to Trieste, to the Austrian Lloyd's, both for dock work, pumping, winding, &c.; two six-horse power to France, for sawing wood and dessicating; one 6-horse power to Sweden, for the Dalocarlia Mining Company; one 6-horse power to Nice, for general purposes; six 6-horse power to the East Indian Railway, for pumping, ballasting, and sawing; and one 4-horse, and one 6-horse power, to Launceston, in Ceylon, for general purposes. Having already said much in favour of these engines, we are glad to be able to refer to such a list as that now quoted, in addition to the one which appeared in our Journal of the 21st, as proving that our opinion is shared by the public generally, and that these engines are gradually becoming adopted, not only here, but throughout the whole world, wherever steam-power of an economical kind is required at the shortest possible notice. As a great saver of that most valuable ingredient of a man's life—time—the very stuff, indeed, of which it is composed, Messrs. Medwin and Hall deserve all the success they have met with, for we have only to contrast the interminable delays attaching to the construction and erection of stationary engines, and the ease and rapidity with which the portable engines are supplied and set to work, generally at a day or two's notice, unless the place is very distant, to perceive at once the great benefit the patentees have conferred upon the industrial community.

THE QUESTION OF NOTICE BY COLLIERS.—At the Petty Sessions, three miners, in the employ of Mr. Bayley, of the Willingsworth Collieries, were charged with leaving their work without having given the customary notice. It was proved that the men knew that 14 days' notice was required by their employers before they would permit them to leave their work; but the men replied that they had left because they had been put to work in a pit where there was water and sulphur. For the complainant it was denied that the pit contained sulphur, and stated that the men had left because, as they alleged, Mr. Thos. Walker, a magistrate, had remarked that it was not necessary that colliers should give notice. Mr. Leigh, the sitting magistrate, dismissed the complaint, saying that if the men were afraid to go down the pit, the magistrates could not force them; still they must remember that, like others, colliers must give 14 days' notice before leaving their work.—*Wolverhampton Chronicle.*



# Mining Correspondence.

## BRITISH MINES.

ALTARNUN CONSOLS.—We have begun again to-day to drive east on the course of the lode in the 20 fm. level; the lode in the west end, same level, is full 3 ft. wide, and of a very promising character, producing tin and stones of copper ore, with two smooth and regular walls, and carrying a leader of flookan on the footwall; I am fully persuaded, ere we have sunk far, the lode will make copper. I am sorry to hear that some one has overrated the lode, by saying it is worth 200*l*. per fm.; I beg to contradict that statement, and say 30*l*. is nearer the mark; we have a good lode, but it must not be valued at that price—viz., 200*l*.—R. REYNOLDS: Oct. 24.

ARUNDELL COPPER.—The Victoria engine-shaft men have been this week engaged in dividing and easing down the shaft to the 36 fm. level. In the 25, driving west of the cross-cut, the lode is much the same as reported last week, yielding about 2½ tons per fathom; and in the same level east the lode is composed of mundic, dark peach, and capel; the lode is so large that we cannot say we have the leader part of it. At the Arundell shaft, sinking from the surface, we have this week some very rich branches of yellow copper ore; the lode is greatly improving as it goes down.—WILLIAM THOMAS: Oct. 25.

BALLESWIDDEN UNITED.—We are now working on the flat lode with 14 men and 3 boys on tutwork, every man working by the fathom. I think that, as the ground is subject to boxes of tin, this will be best for the mine. If our shaft were sunk 10 fms. deeper on this lode we should be able to put a greater number of men to work on it. I well know that we never had the prospect of breaking so much tin as we have at the present time. At Daw's shaft, we have cleared our old work under the 8 fathom level, where five men last month broke 40*l*. worth of tin, and good tin ground is going down in this bottom and each end, all in whole ground. I know that if we had now, instead of 14 men, three times the number, each man would make a profit to the mine of 2*l*. per man every month, and we have now tin ground discovered to put more than that number to work. At the flat-rod shaft, we have come to the bottom. The 40 fm. level we are clearing east with all speed, to come to the winze, which is 6 fms. under this level. In this winze, report says, there is a good lode of tin, and the old workers' tools all in their place, which I think we shall find, as we have found their 20 fms. of pumps and other materials, all as was said. We are also sinking a winze from the 30 fm. level to the 40, where we have got a very good lode of tin. The 20 fm. level is now in 16 fathoms east from shaft, which is near the cross-cut. East of cross-cut we expect to have some good tin ground for tribute. All I want to do is to put more men to work, and then the mine will tell its own tale. I have not stated now any more than I have often done before, for there is no mistake of this being a good mine.—H. MICHELL: Oct. 24.

BAT HOLES.—Since the last general meeting we have taken up all the pitwork in the Cornish shaft from the 60 to the adit level, and laid a railroad in the deep adit level from the Cornish shaft to the California lode, and on the course of the same to the present end, we have also cleared out a quantity of attle, that was left to remain in the level. In addition to this, we have driven a cross-cut from a branch that diverged from the California lode, and formed a communication with the workings that are sunk in the bottom of the shallow adit, and we are now engaged in driving south in the deep adit level, on the California lode; this lode is about 1½ foot wide, composed of spar, blende, mundic, and interspersed with lead ore, assuming a more promising appearance than it has since we commenced driving it; this end is not driven so far south as the shallow adit by 23 fms., where we had a good shoot of ore, but it was cut off by the shale. We have sunk and stoped away the bottom of this level (the shallow) to the depth of 10 fms., out of which a great many tons of lead ore were returned, and we have a pare of tributers working in the bottom of this level at present. I have no doubt that by continuing the deep adit level south profitable ground will be laid open, as it will have to pass under the ore ground that was stoped in bottom of the shallow adit level. In the shallow level we are engaged in driving a cross-cut west, to cut the lodes that are to the west of the California lode, three of which are known to exist between this and the Gravels boundary, which are very little wrought on; these lodes, where seen at surface, are quite as likely to be productive in lead ore as the California lode was when first cut, particularly so as it is a piece of mineral ground from the Gravels Mine to the California lode, which made large deposits of lead ore above the adit level, as also did the lodes in the Gravels Mine; this cross-cut is now driven west 12 fms. 3 ft., and according to the bearings, as seen at surface, the first of these lodes will be reached in a short distance driving, which, if found as productive as the before-mentioned, will quickly remunerate the shareholders for cross-cutting to them all, there being no water charges to contend with. We have also a tribute pitch in the bottom of the deep adit level, on the eastern part of the California lode, which is looking very promising, but sufficient has not been done there to form a definite opinion. All operations are suspended on the Wood lode, in consequence of the water being nearly to the adit level.—W. BARRATT.

BEDFORD UNITED.—In the 130 fm. level east the lode is 2 feet wide, producing good stones of ore: no lode taken down in this level west. In the 115 east the lode is 5 ft. wide, worth 10 tons of ore per fm. Paull's stopes in the back of this level are worth 5 tons per fm. Jeffery's stopes are worth 8 tons. In the 103 east the lode is 2 ft. wide, yielding saving work. Eva's winze in this level is worth 6 tons of ore per fm. Jackson's stopes in this level are worth 4 tons per fm., and Manuel's 5 tons per fm. No lode taken down in Bodenner's winze in the 90 fm. level. In the 80 east the lode is 2 ft. wide, composed of mundic, spar, and ore.—J. PHILLIPS: Oct. 25.

BIRCH ALLER.—Pye's shaft, going below the 40 fm. level, is a little more spare for sinking than it was; the lode is about 2 feet wide, of a very friable white barytes, spotted with lead and mundic, altogether showing a most promising appearance. In the 40 fm. level, south of ditto, the lode is from 4 to 5 ft. wide, composed of a beautiful white and friable barytes, sprigged with lead all over, and producing saving work, which is yielding, I should say, several cwts. of lead to the fathom, and indicating a still greater improvement; in the winze below this level there is a good orey lode, about 2 ft. wide, and producing on an average, I think, about 10 cwts. of good lead to the fathom; and as we go down the lode seems to be more regular and compact; the pitch in the back of this level continues much the same as it was, and producing good lead. The 30 fathom level, south of ditto, continues in good ground for exploring, and the lode is composed of a pretty mundic, spotted with lead. Altogether, the mine is looking better than I have seen it look for some time. The engine and flat-rods, with the other machinery, are working just as usual.—G. R. ODGERS: Oct. 21.

BLACK DOWN.—I have within the last few days examined this mining property, situated between Okehampton and Tavistock, where materials for mining purposes of every description can be obtained on very reasonable terms. In a central part of the sett a very large east and west lode has been opened on the surface, and shows a back of gossan, mundic, and copper ore for 18 ft. wide on the average. In addition to opening on the back of this lode at the surface, a level has been extended a few fathoms eastward on its course, and the appearance thereof, in the present end, is all that could be looked for, and more than could be expected at the depth, being only now about 4 fms. from the surface; nevertheless, the lode continues its size, of 18 ft. wide, and is composed of rich gossan, arsenical mundic, jack, and good yellow copper ore, some portion of which may be considered as good stamps work. Situated to the east and north of this sett is the Okehampton Consols Mine, through which runs a very magnificent north or south lode, or cross-course; and it is more than probable this cross-course intersects your copper lode, before referred to, at some point east of your adit end; and it is my opinion as you extend your adit level driving in that direction, in addition to proving the run and declination of the lode, as also gaining more depth, you will find more copper ore; and I cannot, therefore, but recommend you to continue this driving with all speed, by doing which you will also be determining on the most proper position for an engine-shaft. In addition to the explorations before alluded to, I find there has been an adit level extended westward on the course of this lode, and it has been attended with equally satisfactory results, the lode showing its size and general character, as in the eastern end. A large stream of water runs directly through the sett; and the various ways in which this never-failing and all-powerful stream may be applied for mechanical and all other purposes of mining, I can scarcely over estimate the advantages connected therewith, commanding, as it does, an easily applicable fall of 100 feet for such purposes, must be allowed to be very great. In conclusion, I cannot but recommend you to continue the driving eastward until a favourable site has been chosen for the engine-shaft, the sinking of which should be expedited by the erection of a water-wheel (40 ft. diameter by 4 ft. breast), to which should be attached, in addition to pumping-gear, a hauling-machine, which would effect a considerable saving in the costs of drawing stuff; and I consider the power of such wheel to be sufficient to put you to a depth of 40 to 50 fathoms with the greater ease; you have also here a reserve fall of 60 feet for other wheels, which will enable you to avoid the use of all steam-machinery, and without troubling you further with the many other advantages connected with this valuable property, I beg to say that, if my suggestions are fully carried out, I confidently believe a fair trial will be rewarded with large courses of ore at no very great depth.—JOSEPH RICHARDS.

BOILING WELL.—At present we are fixing a plunger in the 40 fathom level, and hope to put it to work by the latter part of next week. I expect to get all the pitwork fixed and prepare for driving to cut the lode in the 50 this month. The eastern end in the 40 is still productive, producing about 2 tons of ore per fathom. I like the appearance of this lode going east better than ever; it is 5 ft. wide, composed of spar, peach, and copper ore. I can justly say that it is a champion lode, and one, from its appearance, that will make ore to a greater depth than we are at present. The lode in the western end, in the 40 fm. level, is 3 ft. wide, sprigged with ore, but not worth saving. We are driving east on the engine-shaft lode in the 30 fm. level, and also sinking a winze from the 30 to the 40 on the same west of the engine-shaft; in each of these places we have a little ore. To-day is our tribute setting: we have set two pitches in the back of the 40, one at 5s. 6d. in 1*l*., worked by six men; one at 7s. in 1*l*., by four men; one in the bottom of the 40, at 7s. in 1*l*., by four men; and one in the bottom of the 30, on the engine-shaft lode, at 8s. in 1*l*., by four men. We hope to sample 125 tons of ore next week; should these pitches, with the end, prove as well for the next two months as they have for the past two, I hope to have the same quantity of ore by next sampling.—G. REYNOLDS: Oct. 21.

BOLENOWE.—The operations here are progressing favourable, but without any material alteration.—WM. ROBERTS: Oct. 21.

BORINGDON CONSOLS.—In the 12 fm. level east the air is very bad, and we are obliged to remove the machine further back in the level, where the men are engaged cutting down the south side of the level, to make room for it. In the 12 fm. level west we are cross-cutting south, to see if there is any more lode standing. The stopes in the back of this level are much the same as last reported. In the 24 fm. level west the rise is up about 5 fathoms, in a very profitable lode. In the 24 fm. level east the ground is easier for driving, and the lode richer for lead. I expect very shortly to have a further improvement in this level.—W. GODDEN: Oct. 26.

BRONFLOYD.—We have this day cut the north lode, but I am unable to say anything of its character, as a very large quantity of water is issuing from it, although not so much as when first tapped. So far as I can judge, the lode is very strong and wide, and I do not think the driving embraces the northern side of it. When the water subsides I will report fully thereon. The driving to the south is as last reported.—J. JONES: Oct. 23.

BRYNTAIL.—The 12 fm. level, driving east on the north part of the lode, is at present unproductive; the same level driving east on the south side of the lode, has improved in appearance during the last two or three days; there is a great change in its character, which is congenial for lead; it is now producing good stones of ore. The shaft sinking contiguous to the deposit of barytes is still worth 20*l*. per fm.; this dips at an angle of 36° in an opposite direction to the Bryntail lode, and has a north wall, well defined. I have carefully dialled the ground, and find that it will be 6 fms. north of the present 10 fathom level, supposing the shaft to continue its present underlie to that depth: should it be found productive at this point, it will greatly enhance the value of the mine.—J. ROACH: Oct. 26.

BUTTERDON.—The shaftmen are making preparations for sinking below the 30 fm. level. The lode in the 30 fm. level, south end, is 1 foot wide, producing 3 cwts. of lead per fathom; in the same level, north end, it is 6 in. wide, producing a little ore.—JOSEPH KEMP: Oct. 24.

CALSTOCK UNITED.—The sinking of the sump shaft is progressing favourably; the lode from wall to wall is the same as last reported; 2 feet of the south part of the lode is composed of soft prian and spar, with small stones of copper ore, but where the shaft is sunk to the 50, if below the junction, we recommend driving east and west on the lode, and from the relative bearings of these bodies they separate east and west of the shaft. When clear of the great flookan, we think we cannot fail to have copper. You are aware all operations on the mundic pitches are suspended, and the dressers will be discharged as soon as the mundic is weighed off. The pitman who has taken his place as one of the sumpmen, in place of one who has left, and is to receive 1*l*. 1s. per month to keep the pitwork in good order. Captain Burgan was underground on Friday, on behalf of Mr. Mitchell.—J. KERNICK; W. COOKE: Oct. 23.

CAMBORNE CONSOLS.—The 10 fm. level west, on caunter lode, produces stones of good yellow ore. We expect to sample about 30 tons on Wednesday next.—WM. ROBERTS: Oct. 21.

CARADON CONSOLS.—During the past week the new shaftmen have sunk 4ft., and the ground continues to improve. In the 37 fm. level east about 3 ft. has been driven; the ground here also appears to be changing for the better. We have opened another pit on what we believe to be Clyma's lode, in order to ascertain more clearly its direction, and it now appears quite evident that it passes to the west about midway between the 37 and the new shaft; it is about 2 ft. wide, underlaying 2 ft. in a fathom, chiefly gossan and quartz, presenting a good appearance. Other operations on the mine are as usual.—Oct. 21.

CARRACK-DEWS UNITED.—Our engine is steadily at work, and the water is in the fork at the engine and also at Eley's shaft; in the latter we have nine men working—viz., six cutting a plat, and three driving the 14 fm. level east, which is productive both for copper and tin, and worth 20*l*. per fm. I was underground in this shaft yesterday, and broke a kibble of copper, and also one of tin, from the lode. If the lode in Eley's shaft continues to improve as of late, we shall want no more money from the adventurers. I have set the end here at 60s. per fm. I have also set the 12 fm. level to drive at the engine-shaft, at 2*l*. per fm., to four men: we have already driven about 9 ft., and the ground is favourable. We are progressing in laying down the flat-rods from the engine-shaft to North Battery shaft. I expect we shall be complete and at work here on Wednesday next: we should have been ready before had it not been for the sad accident which killed one of our men.—M. DUNN: Oct. 20.

CARVANNALL.—In the rise in back of the 96 fm. level west the lode is 2 ft. wide, worth 12*l*. per fm. The tribute pitches continue to yield fair quantities of ore.—WM. ROBERTS: Oct. 21.

CLARA.—We have extended our cross-cut at the 20 fm. level 5 feet further north than where we intersected the first branch; there is still a quantity of water coming through the ground, but I believe the lode is divided in this place. I have put the men to drive west on the branch for a fathom or two, to see if it leads into the junction, and I found it much improved in driving 2 ft., both in size and quality; it is now from 8 to 12 in. wide, and producing some capital stones of lead, and draining down the water from the old workings rapidly; therefore, I hope in a little time to give you news more cheering.—S. TREVETHAN: Oct. 25.

CLOWANCE WOOD.—The lode in 12, east of Richard's shaft, is 12 in. wide, containing a little copper ore; but the change was under this level in the lode and rock before we had a productive ore course.—T. RICHARDS: Oct. 23.

CRAIGWEN.—The silver-lead lode in No. 1 adit has improved since my last report. The north and south lode is now poor. If it does not improve this week, I shall stop the men, and put them in another place. The shaft is just the same. The masons will finish the bridge this week, and commence the ore pits. The ore dressers have arrived, and commenced work to-day.—HUGH JONES: Oct. 25.

CROSSGILL HEAD CONSOLS.—We have the middle shaft now opened out to the depth of about 13 fms. from surface, and I expect it will be completed to the 17 fm. level by about the latter part of this week. This shaft will be appropriated to the purpose of drawing up the ore, and will also be of great advantage in ventilating the mine. The former shaft is to be used as a footway shaft, &c. We have more hands employed, and as soon as practicable shall set on a much larger number, as we shall shortly have a better opportunity in shooting abroad the sides of the level, stoping the backs, drawing and washing the ores, &c., and we hope ere long to have a quantity into the market. Specifications for the new wheel, stamps, and crusher, are in circulation, and we hope shortly to receive tenders for the construction of them.—THOMAS DICKINSON, Agent: Oct. 23.

CUBERT UNITED.—At Trebiskin, the lode in the engine-shaft is about 14 in. wide, producing some good spots of lead. The lode in the 55 west end is in a more settled state, about 10 in. wide, and producing about 7 or 8 cwts. of lead per fathom, and has an improving appearance. The stopes in the back of the 45 west are worth at the rate of 5 cwts. of lead per fm. In driving in the 35 fm. level the lode is small, composed of spar and prian. At Trebellan, there has been nothing done in the shaft, for the same reason stated last week. The lode in the 56 north end for the past week has averaged about ½ ton of lead per fm. The stopes in the back of this level are producing 4 cwts. of lead per fm.; the lode in the sump-winze is producing 15 cwts. of lead per fm.; the stopes in the back of this level, north and south of the sump-winze, will average from 3 to 4 cwts. of lead per fm. The lode in the 40 north end is 7 in. wide, composed of quartz, prian, and flookan. The lode in the south end is 1 ft. wide, composed of quartz, prian, and has a very promising appearance. The pitches in the back of the 55, east and west, are much the same as last stated. We have on the mines, dressed and undressed, about 9 tons of good ore.—T. TREWIN; A. DOWN: Oct. 21.

CWM DARREN.—I have put six men to clear up the engine-shaft, and hope to begin to sink for bearers and cistern in a day or two. We have risen in the 30 against the winze 6 ft., and sunk below the 20 in all 5 fms. 5 ft. 6 in., leaving 4 fms. 0 ft. 6 in. more to sink and rise, which we shall accomplish in a fortnight from this time, when we shall be in a good position to make returns. In the adit level, driving east, the lode is 18 in. wide, with a small leader of copper ore.—ARTHUR WATERS.

CWMDYLE ROCK.—The stopes in Price's level are rather improving since my last. In No. 6 level, No. 2 stope, we are carrying about 10 ft. of the lode, producing 5 tons per fm. In No. 3 stope we have a further improvement, lode 7 feet wide, producing 6 tons of good ore per fm. The ground here is very congenial for copper: I have every reason to expect we are near a large deposit of ore. At the Lake lode we are raising some good ore. I have no alteration to report in the other parts of the mine.—T. COLLIVER: Oct. 21.

CWM ERFIN.—On the 17th inst. we sampled 45 tons of lead ore, and hope in five weeks hence to sample 30 tons. The lode in the bottom of this level is poor. In the stopes over the 57 the lode looks well. The 45, west of the engine-shaft is in a large lode, but valueless for ore. The level east of the drawing shaft yields 1½ ton per fm., and that west of ditto 1 ton per fm., and apparently the produce will continue.

DARREN.—The 10 fm. level, west of engine-shaft is on a lode 5 feet wide, with a slight mixture of ore, but not sufficient at present to pay for driving. The eastern end in the level is suspended for the time, as the lode is small and unproductive. The deep adit level is still continuing south, by four men, but not extended far enough as yet to intersect the south part of the lode. Francis's level, west of the shaft, is driving partly in the country, and carrying 2 feet of the lode, so as to enable us to communicate with the winze as soon as possible, which I hope will be accomplished in four or five weeks from this time; 2 ft. of what we are taking down of the lode is a good mixture of ore. The winze under the level "Coed" is also sinking by the side of the lode. We have shot some holes in it of late, and found it to be large, and containing good work for lead; therefore I expect when this is communicated to the level below there will be a fine orey piece of ground laid open for about 12 fms. in length. We have not dressed any ore for the last month, but we are keeping a few girls and boys picking it, to prepare for the new tramroad. Yesterday we commenced laying the new road, and shall finish all the iron we have in the mine about Wednesday or Thursday next. I would recommend this road to be completed with as little delay as possible; to suspend the 10 fm. level, driving west for the present; and set those men to build the new pond, which can be completed by them in four or five weeks.—S. TREVETHAN: Oct. 25.

DEVON AND COURTENAY.—There is no alteration in any part of the mine since last report.—T. BAWDEN: Oct. 25.

DEVON UNITED.—We have abundance of surface water, and are, therefore, getting out the underground water satisfactorily. There is no important alteration in the deep adit level north towards the great copper lode; the ground is still quite congenial for the production of mineral.—A. BRAY: Oct. 26.

DUNSLEY WHEAL PHŒNIX,—The stopes in the back of the eastern adit level, to the west of the shaft, still produces good work for tin. We shall take down the lode in the eastern stopes in a day or two, where we have every reason to believe it will turn out rich work. We have completed the reservoir, and are stamping tin. We have a large pile of tinstuff now at grass, and are constantly adding therto.—J. SPARGO.

EAGLEBROOK.—In sinking the west engine-shaft below the deep adit level, the lode is 4 feet wide, and will produce 10 cwts. of lead ore per fathom. I am happy to inform you the lode in the deep adit level, west of this shaft, has improved within the last few days, it will now produce 15 cwts. of lead ore per fathom. In the level east of ditto, going towards the deep adit, the lode is 6 feet wide, composed of gossan, porphyry, soft-spar, and carbonate of lead, but not sufficient of the latter to place a value on at present. In the deep adit level, west of old engine-shaft, the lode is 5 ft. wide, producing 8 cwts. of lead ore per fathom. In the level east of cross-cut the lode is 4 feet wide, composed of porphyry, spar, and gossan, with spots of lead and copper, but not sufficient to set a value on. Our 40-feet wheel commenced working last Monday, and performs satisfactorily; every one who has seen it say that it will equal any they have seen in Cardiganshire. I have discharged the greater part of the surface labourers; the masons are now building the yard at the end of the carpenter's shop.—H. TYACK: Oct. 22.

EAST DARREN.—We sampled this day week 100 tons of lead ore, and about 40 tons of copper ore, and are breaking from 55 to 60 tons per month of the former produce, with 61 miners. The 44 cross-cut has been driven 5 fms. 2 ft. in the lode without meeting with a north wall; it is disordered by slides and beds, but yielded for the whole width from 3½ to 4 tons of ore, or about 15 cwts. per cubic fm. The prospects are good, and the next five weeks' sampling will be from 80 to 90 tons.—Oct. 24.

EAST FRONGOCH.—During the past week the shaft has been sunk 2½ ft., which is now 3 fms. 5 ft. below the 20 fm. level; the ground is a little improved for sinking, and still maintains the same promising appearance. The machinery and everything attached are all in good working order.—T. PASCOE: Oct. 23.

EAST POLGOOTH.—The shaftmen have now completed cutting the plat in the 50 fm. level, with casing, dividing, and footway, and intend, on Monday next, to commence sinking under the 50. If the ground continues as favourable as it now is, I expect in three months after the present month we shall be in a position to drive towards the lodes in the 60 fm. level.

EAST WHEAL GEORGE.—There is nothing new on this mine. I shall put men to try the bottom of this level as soon as I can get them.

EAST WHEAL LEISURE.—The engine-shaft, which is now 4 ft. 6 in. below the 30 fathom level, is still in hard ground; it is a lighter colour, but spare for sinking; we calculate on getting down 9 feet deep, putting in cistern, changing the lift, and be in course for sinking again for the next level, in a little more than a fortnight from this time. The north cross-cut is now about 6 fathoms from shaft; the end is still spare and in dark killas, but there is better looking ground in the bottom of the end. We have set 1 fathom at 7*l*., but I have no doubt that the next price will be much less. The south cross-cut, which is now 4 fathoms from shaft, is set to drive by two men, at 5*l*. per fm.; this end is entirely in dark killas. In the course of the past month we put three men to sink the north shaft, as we found the water was drained from it, but we soon got down to water again (too much to sink in); so we think there is no great chance of doing much more in it before cutting the lode in the 30 cross-cut, which we should have done before this, had we not been so unfortunate as to have met with this hard floor of ground, just exactly as we got down to this level.—Oct. 23.

EAST WHEAL RUSSELL.—Hitchings's shaftmen are cutting a plate for the clack doors, and bearers for the new lift, which will soon be ready for dropping. The leader in the 55, driving east, is taking off north on the lode, the flookan bearing on its regular

point towards Homersham's shaft, on which we must drive: the present end is interspersed with malleable all through. Since we made a communication from the rise to Homersham's shaft, we have been bringing down the shaft to go off on the underlie, also drawing up the lift and rods to surface. We shall commence stripping down the shaft immediately. The risemen raised a little west in the top part of the rise, which will cause a little more ground to be cut down. For a few fms. the shaft will be in the centre of the rise, as we proceed in stripping down. We have discharged the horses from the whim, and put the stuff to the tunnel.—W. METHERELL: Oct. 26.

ESGAIR MWYN.—The stopes in the bottom of the adit level, under the Hospital, are composed of clay-slate, mundic, black jack, and good stones of ore. The stope in the bottom of the 15 is worth 9*l.* per fm. The ground in the north cross-cut in the 25 is a little harder, with spots of ore. The end west, on the course of the lode, produces good stones of ore, but not regular at present. In the 15 east is a good branch of ore, mixed with spar, flookan, prian, and a little mundic; we hope to open some good ground here. We shall put two kibbies to draw, which will enable us to clean up a great part of the orey stuff underground. The water is in fork to the 40, and I hope to be able to go through the old workings, and report on the same. The machinery is working well.—T. TAYLOR: Oct. 21.

GLAUSEVIN.—In the shallow adit the ground is rather easier, and, should it continue, we shall make greater progress in driving the short distance that remains between this end and the first lode. In the level, on Paradise lode, the ground is fair, and the lode 2 ft. wide, composed of flookan, spar, and spots of lead; there is a large stream of water running from this end.—W. H. REYNOLDS.

GREAT SOUTH TOLGUS.—An improvement has taken place in the 50; the lode is clear of the cross-course, and is now 2 ft. wide, producing 2 tons per fathom. The lode in the 60 is 2 ft. wide, with stones of ore, and letting out a quantity of water. The lode in the 40 is 1½ ft. wide, producing stones of ore. We intend to rise against the winze, and hole it with all speed, and then set several pitches on tribute.

GREAT TREGUNE CONSOLS.—The lode at Hobler's shaft is much larger, and is spotted with copper throughout; the ground is still favourable for sinking. At Carkeet's we have almost completed the wheel, and shall resume sinking in a few days.—J. SPARGO.

GREAT WHEAL BADDERN.—The ground in the new shaft still continues to improve, but very slowly. In the 46, both east and west, the lode is about 15 in. wide, producing lead, and will improve, when extended further east and west. The lode in the 40 east is 1½ ft. wide, composed of iron and lead, and looking more promising than it has been for some time. We have a splendid lode in the stopes in the bottom of the 40, and the water is faster, but by bringing on the 46 we shall drain the whole shortly. The lode in the 30 east from the new shaft, and also the 30 and 40 west from Sunderland's, are all producing lead, but not rich. The lode in Kenworthy's shaft is 3 ft. wide, producing mundic, jack, and lead; I never saw a more promising one to make a bunch of ore. The tribute pitches are turning out fair quantities of ore; and we intend to sample to-day 50 tons of ore.—J. ROGERS: Oct. 24.

HAWKMOOR.—The lode now taking down in the 30 fm. level is 2 ft. wide, saving work, and producing about 2 tons of ore per fm.; the lode regular, with a large spar course on the north wall; the lode in the stopes in the back of the 30 is much as last reported, producing very good work, worth about 2 tons of ore per fm. The eastern shaftmen have been cutting down a piece of ground to square down the shaft; the lode here is looking well, and, according to instructions, as soon as the shaft is squared down to the 30 we shall commence sinking again. In the 20 fm level, east of eastern shaft, the lode is much improved, and producing 2½ tons of ore per fm. We have about 20 tons of ore dressed, and expect to sample from 30 to 40 tons of fair quality, on Friday, the 27th inst. Our sampling would have been considerably more, but for the breakage already reported.—J. KENNICK; J. RICHARDS: Oct. 23.

HEMERDON CONSOLS.—There is no particular alteration to notice in the lode at the shaft; it continues to get a little larger as we go down, and yields good work for tin; it is now sunk about 23 fms., and hitherto we have not been much inconvenienced by water, but expect to be obliged to stop and put in the lift very shortly. Our stamps will soon be quite ready, but we are still prevented bringing home the water through some land of Mr. Shode's, not included in the sett. I have obtained his consent, subject to signing an agreement, which Mr. Bozer has to draw up, and who promised me yesterday that I should have it on Monday. Our pay-day will be on Saturday next.—J. WOLFERSTAN: Oct. 22.

HENNOCK.—Palk's engine-shaft is sunk to the adit level, and the sumpmen are engaged in sinking for a fork and cutting plat; this will take about a fortnight to complete. The end at the 30 fathom level, south from south-west shaft, on the western lode is driven about 5 fathoms, and formed a junction with the middle lode gone through in sinking the said shaft; at this point we have met with a good orey lode, and brought to surface a good pile of work within the last 6 feet driving. The lodes at present are divided by a small seam of killas and jack, the western lode being about 2 ft. wide, composed of soft sugary spar and prian, with good stones of lead; at the same level in the eastern cross-cut, towards the eastern or barytes lode, we have branches of jack, and spotted with lead in good killas ground. The air is very dead in the rise above the back of the 13 fm. level, but the lode is still of the same promising appearance. The ground in the adit level, towards the barytes lode, is still very easy for exploring, and the men are making good progress. From the ground that has been laid open on the course of the lode in the different levels, south from south-west shaft, I consider the prospects of the mine never looked better than at the present.—H. RICKARD: Oct. 23.

HILL BRIDGE CONSOLS.—The ground at Street's shaft is without alteration. The ground in the shaft sinking on Wheal Jewel lode is favourable, and the lode has a splendid appearance, it is spotted with grey and yellow copper throughout, and is full 7 feet. wide.—J. SPARGO.

HINGSTON DOWN CONSOLS.—Since my last report, the men in Morris's shaft have been engaged in cutting a tip-plat, which is not yet quite completed, but it is hoped by the end of the present week that it will be, when the sinking of the shaft will be resumed. The lode in the cutting of this tip-plat is found to be full 6 feet wide, and very productive. The 75 end, driving west, continues poor in the part of the lode that is being carried. The eastern end of the same level is without material alteration, being worth about 5 tons of ore per fm. The lode in the 65 has improved during the past week, and is worth 3 tons of ore per fm. Arthur's winze being completed to this level the men are put to drive west, to meet the end driving east; the lode here is of much the same character as described last week. In the 55 east the lode is still large, and is carrying a leader, 6 in. wide, producing good stones of ore. The 65, driving east and west of Hitchins's shaft, on the course of the south lode, still continues to produce good stones of ore. The weather is very much against our dressing operations, but it is hoped about 300 tons of ore will be ready for sampling on Friday next.—W. RICHARDS: Oct. 25.

HOPE VALLEY.—The lode in the 47 fm. level, driving south, is 1½ foot wide—congenial spar, spotted with lead ore. The same remarks will hold good with regard to the 47 fm. level, driving north. No lode has been taken down in the 35 fm. level, driving south, since last reported. An improvement has taken place in the winze sinking below the 35 fm. level; the lode is 18 in. wide, producing 1 ton of lead ore per fm. Horton's lode in the 23 fm. level, driving south, is about 1 foot wide, producing occasional stones of lead ore, but not to set any value on. The tribute pitches are yielding a moderate quantity of lead ores.—W. BARRATT: Oct. 25.

IVY BRIDGE.—The new engine-shaft is sunk 13 fms., and continues in the same favourable stratum. The old shaft is made good to the 32 (the bottom of the downright), and we are quite ready to commence placing the pumps in the underlie part of the shaft; this portion we believe to be substantial for the greater part of the distance—viz., 36 fms. more. Next week we shall commence our cross-cut from the 32 towards the new shaft. Our engine works well, with much less consumption of coal.

KILRAINE.—I have set the 18 fm. level to drive east 2 fms., at 6*l.* per fathom; the lode in the end is 6 in. wide, composed of spar and blende, with spots of ore. In the bottom of the adit the lode will produce 1½ ton of lead ore per fm.; and I have no hesitation in saying, that when the level is driven about 4 fms., in order to come under this point, we shall meet with a very rich lode for a considerable distance.

LEEDS TOWN CONSOLS.—Our sumpmen are engaged in cutting a plat; this will be completed by to-morrow morning; we shall then commence changing our lift, as mentioned in my last. In the 30 we have driven 9 ft. north of the lode; the ground is full of small branches of wolfram, and some tin; whether the expected part of the lode is split in those branches, or whether we have driven far enough, we cannot at present say; I should like to drive 6 ft. further, to prove it, before we commence driving on the course of the lode. Being anxious to ascertain as nearly as possible how far we have to drive south to cut the lode east of the flookan in the 10 and 20. We have costeaned at surface, and find it to be hove from 16 to 18 fms.; this is 6 or 8 fms. further than we expected; I do not think the heave will be so much down in settled ground as it is near the surface. We are opening the ground for the flat-rods as fast as possible; we think it will take nearly all our men for a week to capstan in changing the lifts, so that there cannot be much done underground by the time my next report is due. There is no alteration to report in the levels on Gooch's lode.—PETER PASCOE: Oct. 24.

LLANDUDNO.—We have holed the cross-cut at the bottom of Treweek's shaft as accurately as could be, and are preparing to throw the kibble down at once. We shall drive north and south, which will greatly facilitate the cutting of the plat. Considering that the strings we have cut in this level are crossing each other irregularly, and the ore running flat with the bed, I think it will be most advantageous to us to set it to the men on tribute for a little time; we shall do so as soon as the cross is clear. This evening we hope to ship a cargo of the last week's sampling.—Oct. 26.

LOVEDEN UNITED.—The lode at the engine-shaft is from 5 to 6 ft. wide, underlying about 1 ft. in a fm., composed principally of blende, with a mixture of quartz, copper, and lead ore. The 10, east of this shaft, is in a lode 2 ft. wide, but with very little ore at present. The 10, driving west of Pen-y-bank shaft, is in a lode 18 inches wide, with a slight mixture of ore, but not of much value as yet; the 10, east of ditto, is in a lode 4 ft. wide, and producing 8 cwts. of lead ore per fm. The stope in the back over this end is yielding from 12 to 15 cwts. of lead per fm. The lode at the shaft has improved since we commenced sinking—now producing at least 1 ton of silver-lead ore to the fm. We are now fixing a lift of pumps from the adit to the 10, at this shaft, which will save the drawing of the water by the whim; this will save great expense until these levels are communicated. We are expecting the vessel in daily to ship the ore, and as soon as this is done you shall have the bill of lading sent to your office.—S. TREVETHAN: Oct. 25.

MOLLAND.—The lode in the 62 east is much larger and harder than when last reported, producing a few stones of ore. The lode in the winze sinking below this level maintains its size and character, and is now worth about 5*l.* per fathom. The lode in the 52 east is still very poor, much disordered, and in its present state is not likely to make ore. The stopes in the back of this level are worth 10*l.* per fm. The stopes in the back of the 42 east are worth 9*l.* per fm. The pitch in back of this level has improved since last week, and the men are getting wages. We have now a plentiful supply of surface water.—T. BENNETTS: Oct. 25.

MOUNT'S BAY CONSOLS.—Our setting on Saturday last was as follows:—The cross-cut to drive north by eight men, at 11*l.* per fm.; ditto to drive east on the course of the lode by four men, at 3*l.* 10s. per fm. The south cross-cut is suspended for the present, in consequence of the increase of water; this cross-cut will be resumed driving as soon as the 9-in. drawing lift, now in course of fixing, boiler repaired, cleaned, &c., which will take a fortnight from this time. The lode east of engine shaft is 6½ feet wide, yielding fair stones of tin.—J. RICHARDS: Oct. 25.

MANEROS AND PENRHYN.—In the Eystumtean deep adit, the counter lode is 4 ft. wide, composed of killas, quartz, blende, and mundic, with a slight mixture of lead and copper ore, with a promising appearance. In the 46, east of Penrhyn, the lode is a little improved since my last report, and is producing stones of ore; in this level (west) the lode is 2 feet wide, but poor, on account of the water being so quick. The rises to the 26 we have suspended for the present, and put the men to stope that sump, where the lode on an average will yield full ½ ton of ore per fm. In the 36 east the lode is at present poor, but in the rise and stopes over same the lode will yield about ½ ton of ore per fm. This week we shall sample 20 tons of ore, being from our last.—M. BARBERT.

NANTLLE VALE.—At the Western Quarry, during the past fortnight the area has been emptied considerably of the waste on the south side, and in the clearance of which several good blocks of red slate have been met with, and converted into slates. The rock on the north side is yielding a few slate blocks, but it varies much, and does not, in my opinion, assume a very promising appearance; we have the area sufficiently cleared for the use of three or four tramways, which being laid to convey the waste from either side, enable a considerable quantity of slate to be daily removed, 90 tons being the average weight of waste daily raised, but this only by the aid of two horses, owing to the depth from which it requires to be raised. A portion of the slip on the north side has yet to be removed, and it is being slowly proceeded with. The tunnel which was driven for the drainage of the area has now been walled up at the entrance, through which an aperture has been left for the drainage of any water.—The Eastern Quarry during the past fortnight has been very considerably opened. The whole of the rock which formed the old tunnel has been entirely removed, and also a very large portion of considerable width on the north side, the removal of which has now left a spacious opening to the quarry; on the east side another extensive opening has been effected. By the removal of the tunnel a very fine piece of rock is now available for slate making; the top rock is excellent. Owing to the removal of the tunnel and other openings, the quarry is not yielding many slate blocks at present, but the uncovered rock promises good returns when worked. In the field adjoining, the shaft has been extensively worked, but the rock is not looking very well at present.—At the Victoria Quarry, the operations are being favourably proceeded with, and a cutting extending from the lake up to the road leading to the farm has been nearly made.—C. A. DELMAR: Oct. 23.

NORTH BASSET.—In the 52 fm. level, driving west of Lyle's shaft, the lode is 4 ft. wide, worth 70*l.* per fm.; in the stopes in the back of the 52 fm. level the lode is worth 80*l.* per fm. In the rise in the back of the 52 fm. level the lode is worth 50*l.* per fathom. The winze sinking below the 52 fathom level is down 5 fms. in the bottom; the lode is worth 100*l.* per fm. In the 112 fm. level, driving west of the new shaft, the lode is worth 20*l.* per fm. In the winze sinking below the 102 fm level the lode is worth 16*l.* per fm.—T. GRANVILLE: Oct. 21.

NORTH BULLER.—King's shaft is sunk 7 fms. below the 33 fm. level; the lode at this point is split up in branches, composed of prian, peach, quartz, and mundic, occasionally stones of yellow ore, but nothing to value, and is inclined to underlay south a little—sinking by eight men and four boys, at 2*l.* per fm. The end driving east on King's lode, in the 33 fm. level, is in 6 fms.; the lode at this point is small at present—driving by four men, at 6*l.* per fm.—J. S. CUDLIP: Oct. 21.

NORTH SORTRIDGE.—In accordance with your request, I beg to send you the following report:—This mine is situate in the parish of Whitchurch and county of Devon; this sett is sufficiently extensive, and operations can be carried on, on a large scale, on the course of the lodes, east and west. Three lodes of great promise have been discovered in this sett. The one called the middle lode has been opened on by sinking a small depth on its course, and some trenches made on the back and at different places; this lode presents the most promising appearance, being from 4 to 5 ft. wide, embedded in a most beautiful stratum of killas, and composed of congenial spar, gossan, capel, mundic, and impregnated throughout with black and yellow copper ore. There is not the least doubt but that this lode alone will be found sufficiently productive to remunerate the adventurers for an outlay of capital to properly lay open the mine by sinking and driving, and erecting the necessary machinery for working the same; but there being other lodes of great promise known to exist in the sett, and also having the advantage of a large cross-course traversing the same from north to south, profitable results are expected to follow from this alone. It is not only that the middle lode shows such indications of abundance of mineral at an early period, but the district itself is worthy the attention of all parties of enterprise, being in the Tavistock district, and about one mile from North Wheal Robert and Sortridge Consols, which bid fair to be productive of immense wealth to the fortunate proprietors. There are also the Crebor and Crowndale lodes to the west, which made large profits in the former working, and again likely to be remunerative and lasting. Devon Burra Burra to the north, and the Dartmoor granite range about 1 mile north-east, having the granite range so near, and the stratum being the most congenial for a large deposit of copper ore to be found in, it is quite in accordance with the views of geologists and miners, that where lodes exist in a clay-slate or killas near the granite they invariably contain large quantities of copper, such are the concomitants of North Sortridge sett. I might say further, taking the locality into consideration, and the present appearance of the lodes laid open, I have not the least doubt of your being successful in having a profitable mine, and that too at an early date. I should recommend sinking a shaft on the course of the middle lode, and that being a north underlay, it will fall in conjunction with the north lode at no great depth, the north lode being a south, where you might expect to have a large deposit of copper; this has been the case in most instances. According to present indications, a large sum of money will not be required to work the property, as returns might be made very soon to help, if not meet, all the cost in laying open the mine. Such a district as this is rarely to be met with, being surrounded by some of the best mines in England, and the granite only a mile distant; my opinion is, that if you work this mine with spirit, skill, and economy, the day is not far distant when we shall see a number of hands busily engaged in preparing large quantities of ore for the market on the dressing-floors of North Sortridge Mine.—W. COLWILL: Oct. 24.

NORTH TOWY.—The lode in the adit continues to improve, and is now worth 7 cwts. of lead ore per fm.; we have during the present week put two more men in this end. The lode in the winze is at present rather disordered. In the 10 fm. level we have a large and kindly lode, producing some good stones of lead.—W. H. REYNOLDS: Oct. 21.

NORTH WHEAL ROBERT.—I received your letter this morning, in which you request an assay from the last parcel, but we are not allowed to remove or touch it, after the sample is taken, before it is weighed. We have an assay already, the produce of which is 5½. I expected you had been brought acquainted with it through Mr. Wolferstan, it being no other than a second parcel. However, it is now looking very cheering, and I have no doubt we shall have a first-rate parcel at the next sampling.—A. PAYOR: Oct. 23.

— At Murchison's engine-shaft, we have completed our 11-inch plunger, and it works exceedingly well; we shall now be enabled to resume the sinking of this shaft with vigour. We have hauled this day from the lode in the 30 end some fine rocks of ores, of superior quality. The other parts of the mine are just as last reported. At the trial shaft, on the western ground, we are very busy in erecting whim, casing and dividing the shaft, &c., which will be completed in a few days.—ANTHONY PRYOR: Oct. 24.

OKEL TOR.—The engine-shaft is progressing favourably to the intended 35 fm. level. By the end of the week the shaft will be more than 6 fms. below the 20. There is every appearance of the present favourable ground continuing. The ground in the 20 fm. level cross-cut, south of the copper lodes, is improving. Within the last few days the men have broken some rich silver-lead ore in the cross-cut which is driving on the eastern side of the north and south silver-lead lode; the branch that is carrying this lead will unite with the main part of the silver-lead lode, between the 20 and 35 fm. levels.—W. B. COLLOM.

OLD TREWETHER CONSOLS.—The engine-shaft is still as last reported. The lode in the back of the 27 fm. level is greatly improved; we think, by the appearance of the antimony in this place, there is another part of the lode still further west, which we shall arrive at by driving a cross-cut a few fathoms from the 27 fm. level, and also by clearing the old bottoms in the 20 fm. level, which we are now doing as fast as we possibly can. The stope in the 20 fm. level is producing good saving work; the stope in the bottom of this level is not so well as last reported on. The 20 fm. end, driving south, is now producing good stones of ore. The cross-cut north to the lead lode is not so favourable for driving, being mixed throughout with branches of spar and capel.—Wheal Thomas: We have commenced sinking a winze on the copper lode, and find the lode large, producing good saving work; the lode in the end is without alteration.—Wheal Rose: The men are still progressing very satisfactorily. The dressing department, with all other surface operations, are progressing very favourably. We are happy to inform you we have now made arrangements for a vessel to take the cargo of ore to London, which we fully intend (wind and weather permitting) to ship on Friday or Saturday next.—R. H. VERRAN; S. KEAST: Oct. 25.

OOLA.—Our western level is extended 5 fathoms on the copper lode, which is from 3 to 4 feet in width, and from which we are breaking good stones of ore. We have driven 6 feet west on the lead lode; the branch of lead is from 8 to 9 in. wide, good saving work.—J. RICHARDS: Oct. 21.

PENCORSE CONSOLS.—The east shaft is communicated to the 20 fm. level, and the men are now employed in cutting a plat. The lode in the end east is about 2 ft. wide, most of it saving work for jack, with good stones of lead. The lode in the 10 end east is not looking quite so well as last reported, being a little disordered with veins of spar. The lode in the adit end is 1 ft. wide, producing a little jack; the ground is very congenial for mineral. The stope in the back of the 10 fm. level is still producing a good deal of jack, with a little lead. The winze in the bottom of the 6 fm. level west is looking well. We are putting in a railroad, to convey the ore from the east shaft to the dressing-floors; this will effect a great saving of horse labour. The machinery is working well; the engine is only consuming 11 cwts. of coals in 24 hours; we find that the coalwe have had from Swansea is of superior quality, and 3s. per ton cheaper than we have hitherto been paying. We shall not send off any more ores until further orders from the committee.—J. DALE; J. EDWARDS: Oct. 24.

PENHAUGER.—There is nothing new to notice in this mine since last week.

PENLLYNE COURT.—The sump-head will be finished, and the men commence to sink below the 20 fm. level on Monday next. The first 3 fms. will be through a hard rider of limestone, mixed with spar, after which I shall expect to cut the footwall of the lode, when I have every reason to hope we shall get into profitable ground, as it is evident the ore bears down, and that we are now below the old workings.—J. GRIFFITHS: Oct. 26.

PENPOMPREN.—The lode in the shaft, sinking under the deep adit level, is 4 ft. wide, composed of light clay-slate, with a strong mixture of carbonate of lime, blende, and lead ore, and has a very promising appearance. The lode in the deep adit level, driving east of this place, is 5 ft. wide, with a mixture of ore for 3 ft. wide, which we are saving for dressing; this is much improved, and of a very cheering character. We shall sample the little parcel of ore to-morrow, the particulars of which I will send you after.—S. TREVETHAN: Oct. 25.

PENQUEAN SLATE QUARRIES.—This last week we have raised some very large stones for sawn and planed flooring, on order, as soon as we get our plane fixed.—J. ASHWORTH: Oct. 25.

PERRAN CONSOLS.—Our settings on Saturday last were as follows:—The 50 to drive east of the engine-shaft, to four men, at 60s. per fm.; ditto to drive west, to four men, at 70s. per fm. The cross-cut to drive north in the 40, to six men, at 7*l.* per fm. A pitch in the back of the 40, east of the engine-shaft, to three men, at 12s. in 1*l.*; and a pitch in the bottom of the 30, east of the whim-shaft, to two men, at 11s. in 1*l.* The other two pitches worked last month being very wet, are suspended until drained by driving the ends. We have to sink the engine-shaft 3 to 4 ft. more, and fix 20-fms. of drawing lifts, &c., before we commence sinking; this will take about three weeks more. The lode in the 59 east is 18 in. wide, producing good stones of tin. We have gone over 12 fms. of good tin ground in this level. The lode in the 50 west is about 1 ft. wide, producing good work for tin, not quite so rich as it has been; but we think from its appearance it will shortly improve.—J. RICHARDS; F. GUNDRY: Oct. 24.

RITTON CASTLE.—Agreeably with your request, I went to Shrewsbury, and from thence to Ritton Castle Mine, in Shropshire, where I found the mine situated between the celebrated Grit and Bog Mines, and supposed to be on the same lode; the distance of each is not above ½ mile from Ritton Castle Mine, which is certainly in a very favourable situation; the stratification is much the same as the adjoining mines. In the Welsh district, I have invariably found the productive lead mines to be situated at the junction of two or three lodes; this law I also found to prevail through this district. I then proceeded to examine your mine, where I found the sett extensive, and containing one lode running near east and west, and two or three running about north and south, with a large elvan course crossing them (as shown in the sketch). Near this point an engine-shaft is sunk to about the depth of 22 fms., and a level driven east about 30 fms. In this driving the lode has been seen for about 20 fms.; about 4 or 5 fms. of this ground has shown traces of lead, but not enough to value; the present end is in the elvan course, which is a hard stone, but is very favourable for driving, having very loose joints in it. I should consider they are nearly through this hard rock. I next proceeded south-west, in a cross-cut driving to cut one of the cross lodes near some old workings, where lead was said to be raised by a former party; this level, I should consider to be within 2 or 3 fathoms of cutting the lode: the end at present is hard, but the ground presents a mineral appearance, and it is not unlikely lead will be found in it. I next went through the shoal adit on the east of the elvan course, where the lode presents a more favourable appearance, and shows traces of good ore; a winze is then sunk under this adit 8 fathoms, and a level driven, from which a few cwts. of lead have been taken. The men are at present stopping the bottom, but there is not lead enough in the lode to pay for working it in this way; I should advise you to stop it at once, and prosecute the deep levels from the engine-shaft, the east one will be under the lead ground in a few fathoms, and when they come to the loose jointy part of the lode, rise up to meet the level extended from the winze: if lead is found it can be taken out for half the money it can under the present mode of working. I must here remark that this mine certainly presents several favourable points of intersection, but only one is laid open—namely, No. 1 in the plan or section, and the level being only 6 feet high is not a sufficient trial. The captain and men hold out to sink deeper, this I strongly oppose; this level is quite deep enough to prove if lead is here in sufficient quantities to warrant sinking deeper, and you have not a better chance for lead than at the present depth. In conclusion, I would remark that lead may be found shortly by extending the present levels to meet a portion of the expenses, or even all.—NICHOLAS ENNOR: Oct. 16.

— We are expecting every day to be through the hard piece of ground, which has for some time past impeded our progress. There is a current of air evidently coming from the winze under the adit level, so that I have put men to raise ore north of the hard ground, at 8*l.* per ton, including all charges—the ore to be made marketable.—R. P. EDELSTEN: Oct. 26.

ROUND HILL.—The shaft to command the north and south lode is holed to the deep adit level, in the top of the sump, all right. The Coppice shaft is now down 10 fms. 1 ft. from surface; ground still favourable for sinking, and in a more settled state, wherein a lode will exists; and we are happy to inform you that a lode is cut in the shaft, of the most promising appearance, and, from what can be seen of it, the underlay is towards the Coppice lode, but of this we shall be able to speak with more confidence when we have progressed a little deeper with the shaft. I am glad to say that the principal part of the castings for the shaft on the north and south lode will be delivered on the mines in a few days, and orders have been given for the castings for the Coppice shaft. The north and south lode in the 10 fm. level, driving south, is 4 ft. wide, spotted with lead ore.—A. ROWSON: Oct. 25.

SORTRIDGE CONSOLS.—Our eastern engine-shaft is about 8½ fms. deep; the lode is about 2 ft. wide, worth from 1½ to 2 tons per fm.; the eastern end at present is very poor, worth nothing to value. Williams's winze is about 7 fms. deep; the lode is 4 ft. wide, not quite so good as it has been, worth at present about 7 tons per fm. Benny's winze is about 5 fms. deep; here we have a cross-course, which has thrown our lode a little north; therefore, we have not all lode in the winze. The part we are carrying is worth about 6 tons per fm. Hitchins's engine-shaft is about 16 fms. deep. We have cut a plat, and done other things that are necessary, otherwise we should have sunk more. We shall sample, on Friday, the 27th instant, 150 tons.—J. METHERELL: Oct. 25.

SOUTH BOG.—The lode in the 35, driving north, is 3 feet wide, composed of carbonate of lime, gossan, and manganese, of a most promising character. The ground in the cross-cut, driving west, continues as last reported; we expect to take the north and south lode here shortly. There is an improvement in the stopes under the 23, which will produce 2½ tons of lead ore, worth 34*l.* The lode in the end of Powell's adit is 4 feet wide, and promises to be productive for lead ore. We have sold 22 tons of lead to J. P. Eyton, Esq., at 13*l.* 13s. 6d. per ton, and shall shortly be in a position to continue our monthly samplings.—S. MORRIS: Oct. 27.

SOUTH CRENVER.—The flat-rod shaft is sunk below the 94, 5 fms.; the lode is 2 ft. wide, with stones of copper ore. The 94 is driven 10 fms. east; the lode is 18 in. wide, with stones of copper ore. The 94 is driven 9 fms. west; the lode is 2½ feet wide, yielding ½ ton of ore per fm. In the 84 west the lode is worth 1½ ton per fm. The lode in the 84 east is 1 foot wide, hard and poor. The lode in the 64 east is 2½ ft. wide, yielding 1½ ton per fm. In the 54, east of Gore's, the lode is 1 ft. wide, yielding 1 ton per fm. In the 54 west, on new lode, the lode is worth 1½ ton per fm. In the 44 east the lode is 18 inches wide, producing good stones of ore. In the winze sinking below the 74 fm. level, west of flat-rod shaft, the lode is 2½ ft. wide, yielding 2 tons of ore per fm. The lode in the winze sinking below the 44 is worth ½ ton per fm. The lode in the 34, west of flat-rod shaft, is yielding 1 ton per fm. There is not much improvement in the pitches. We expect to sample 125 tons of copper ore to-morrow, about the usual quality.—T. RICHARDS: Oct. 23.

SOUTH DEVON GREAT CONSOLS.—The ground in the engine-shaft continues rather hard for sinking. We shall soon have the cross-course in the shaft, and then I expect greater progress will be made; this shaft is sinking by nine men, who are working satisfactorily; and every effort is being made to get it down as quickly as possible. In the cross-cut our progress is satisfactory, the ground having improved a little for driving.—J. COCK: Oct. 25.

ST. AUSTELL CONSOLS.—In driving east at Dowson's engine-shaft, during the past week, a great improvement has shown itself in the lode. We have some good stones of copper in the lode; the ground by the lode is rather harder than we have yet had it; we are in now 8 fms., and we have from 7 to 8 fms. more to drive to meet the junction. The shaft is now about 10 ft. under the 15 fm. level. At Young's engine-shaft, the tin department is just as usual. The lode east in the 25 is not quite so good as last reported, being at present disordered. In driving north in the 35, on the course of the nickel, we have a most beautiful branch of ore, worth about 50*l.* per fm. No. 1 back, south in the 35, is worth for nickel about 35*l.* per fm. No. 2, ditto ditto, worth about 45*l.* per fm.; some part of this back is worth 60*l.* per fm. In the winze south, under the 25, the back is worth at least 60*l.* per fm. In the back south, in the 25, the back is worth about 40*l.* per fm., and the branch No. 2 west, in the 25, is very rich for nickel for about 4 ft. long. I can see a most decided improvement in the whole of the nickel department, and I believe this will be the most extensive nickel mine in all Europe in the course of a short time.—R. H. WILLIAMS: Oct. 21.

TAMAR MARIA.—Our progress in driving the adit end, during the past week, has been rather slow, in consequence of meeting with a floor of spar, capel, &c. I expect, however, to meet with No. 4 lode very shortly.—E. JAMES: Oct. 24.

TEES HEAD CONSOLS.—The driving of the new level is progressing satisfactorily. For the last 3 fms. driving we have had ore all the way. The sill is now quite sound, containing leads of spar, interspersed with ore. We have also small nuts of solid ore intermixed with the clay and gravel lying on the top of the sill; this proves that we are getting near a vein, and when found, as before stated, I have no fear of its being unproductive. The ore and stuff produced is much similar to that taken from the old level, driven in the alluvial clay and soil, and I have every reason to believe that it proceeds from the same vein. We shall push on here with all possible dispatch, as I feel confident we have something good ahead, and near at hand.—THOS. DICKINSON, Agent: Oct. 23.

TEES SIDE.—The walling of the wheel-pit at Metal Band is now completed, so as enable us to commence laying on the wall frame and erecting the wheel, which will be got on with as fast as possible. We shall shortly require the new pumps, ordered for the purpose of forking the water in the Metal Band shaft. The lode in the adit level, driving east at Metal Band, still produces moderate bowse work; driving by four men, at 3*l.* 10s. per fm. The ground in Emmerson's cross-cut adit level, going north, is rather harder than for some time past; driving by two men, at 6*l.* 5s. per fm. We have another hard hazle still rising up in the bottom of the level. The lode in the 20 east, at Providence, is rather contorted and small, but still produces a small quantity of ore; driving by four men, at 5*l.* 15s. per fm. The lode in the winze and stopes in bottom of the 20 east still contains a rib of almost solid ore, from 5 to 7 in. wide, but the operations of stoping, &c., at this place are suspended for the present, in consequence of the water being too quick and troublesome to enable us to do good labour. As soon as the 24 below be driven a fathom or two further east, we shall be able to put up a rise, in orey ground all the way, which will unwater the winze and stopes, and enable us to work to greater advantage. The lode in the 24 east is as for some time past, producing some moderate bowse work; driving by four men, at 6*l.* per fm. The lode in the stopes in back of the 20 east is about 4 feet wide, producing good bowse work, stoping by four men, at 4*l.* per fm. The lode in Todd's stopes in back of the 20 east, near the engine-shaft, is producing about ore enough to pay cost; stoping by two men, at 3*l.* 12s. 6d. per fm. I have to-day put two men to rise in the old rise in back of the 20, east of stopes, on trial; they have a rib of ore 1½ inch wide, to commence with; I should think this place will shortly improve; rising at 5*l.* per fm. The opening out of the leat from Providence to Metal Band is almost completed, but we have the launders yet to erect. About 40 hings, or 16 tons, of ore will be ready for carting in a few days' time, samples of which I have forwarded to-day.—JAMES COLLOM: Oct. 23.

THOMAS'S UNITED.—The lode in the 60 fm. level west is the same as last reported; the end is at present suspended, and the men will commence to-day to rise against Jenkins's winze. In No. 1 stope, in the back of the 60, west of Lloyd's winze, the lode is 18 in. wide, yielding 6 cwts. of lead ore per fm. In No. 2 stope the lode is 2 ft. wide, yielding 7 cwts. per fm. In No. 3 stope the lode is 2½ ft. wide, yielding about 7 cwts. per fathom. In the stope in the back of the 50 east the lode is 15 in. wide, producing 7 cwts. per fm. In the 40 fm. level, driving east of the engine-shaft, the lode is 2½ ft. wide, and spotted with lead ore, but to no value. In the stope in the back of the said level, west of the rise, the lode is 1 ft. wide, and worth about 15 cwts. of lead ore per fm. In the winze sinking below the 30, west of air-shaft, the lode is 10 in. wide, and worth 10 cwts. per fm. There is nothing new at level Gwartheg.—ARTHUR WATERS.

TOKENBURY.—At our monthly setting, to-day, I was much pleased to find that the ground in the 37 fm. level cross-cut south is much improved; 8 fms. have been driven during the past month, and the level set again to-day, to six men, 10 fathoms, or the month, at 5*l.* per fm.; this level is now extended 34 fms. south of D lode, and to within 30 fms. of the new south lode, which, should the ground continue as good as it is now, we shall reach in about three months from this time; the cross-course has a very good appearance, and is traversed by frequent branches of quartz, mundic, and ore, which indicates a near approach to a lode which, according to the number of lodes marked in the plan, and seen in the adit, cannot be far off. I am very sanguine of success here.—Oct. 21.

TREGONEBRIS AND FAT-WORK.—The manager states that—The engine commenced working this afternoon. She worked admirably well; other than this could not be expected, as it was erected by that well-known engineer, Capt. Samuel Grose. We shall now proceed with the sinking of Jenkyns's engine-shaft as quickly as possible, by six men and three boys, the stratum of which is of the same congenial character as when I wrote you last; if it continues, of which I have no doubt whatever, as we proceed down, we shall sink about 10 fathoms per month. The shaft is now down about 11 fathoms from the surface. The lode we cut north of Highburrow shaft is so good as when I sent you up the specimens taken from it, but, as I said in my letter, we cannot work at this part of the mines to profit until we have drained the water off, which will take us two months to do. My advice to you and your friends is to keep as large an interest in these mines as you and they possibly can, for my opinion is, as it ever has been, that it will prove shortly one of the richest tin mines in Cornwall.

TREMOLLETT DOWN.—A cross-cut has been driven about 120 fms. in length; in this cross-cut we have gone through four lodes—viz., No. 1 lode has been driven on about 25 fathoms, and is composed principally of white flookan, intermixed with mundic and spar—a very promising lode for ore in depth. No. 2 lode has been driven on about 10 fms., composed of gossan and mundic, &c., spotted with copper ore—a very promising lode to make ore in depth. No. 3 lode has been driven on east about 60 fms., and have driven about 30 fms. west, and sunk a winze on the same lode about 9 fms., and put up a rise to surface to ventilate this level; this lode on the average is about 3 ft. wide, composed of mundic, quartz, white iron, &c., with a little lead and copper ore now and then; this lode has been very highly spoken of by several inspecting agents. No. 4 lode has been driven on south about 30 fms., and north 7 fathoms; this lode will average 5 ft. wide, composed of quartz, mundic, and prian, with copper

and lead ore; this lode is worthy of an outlay of capital. I have been connected with mining for the last 20 years, and never saw a more promising lode for an adit level. I have seen in the west of Cornwall large steam-engines put up, with not half such kindly lodes as we have here. I must say again, this mine well deserves a steam-engine. The killas in the cross-cut has become much lighter.—J. Richards: Oct. 21.

TRENOW CONSOLS.—These mines are looking very well, so deep as we have seen. The tin lode at Carn Perran, in the 36, 30, and 20 fm. levels, is looking first-rate, and we expect to return a pretty good quantity of tin this month. We have set two pitches in the back of the 30 fm. level, east of Hill's shaft, at Carn Perran, one to four men, at 4s. 6d. in 1l., and the other one to four men, at 5s. in 1l. We have cleared the 40 fm. level west at Trenow Consols, on the copper lode, and we still continue clearing the 30 fm. level west, on copper lode. The 40 is extended 95 fathoms west from engine shaft, and the 30 about 110 fms.; the lode in each end is from 2 to 4 ft. wide, backs looked for copper. We have set this week two pitches to two men in each pitch in back of the 30, on the copper lode, at 13s. 4d. in 1l. each. Yesterday we discovered a good lode of tin in the 30, and we had a fair sample tried to-day, which produced 5s. per sack; this is about 2 ft. wide, and greatly enhances the value of the mines. We are fully convinced that if we had stamping power on the mine, instead of selling the tinstuff to bargain-buyers, as we do at present, we could return a great quantity of tin every month from Trenow, as well as the rich tinstuff from Carn Perran. The fend-off bob is fixed in at the 30, so as to break our underlie. The eistern, with lift, is fixed in the 40, and we have begun to drop our drawing lift to the 50, which, if no delay occurs, we expect to see by next survey day. All our operations are progressing exceedingly well, and we feel somewhat delighted in saying the mines are looking better throughout than ever we expected.—J. Carthew; J. Smith; T. Benneyan: Oct. 25.

WEST BASSET.—North Lode: The 94 fm. level east is improved—ground easy—with a leader of ore on the south side, worth 1½ ton per fm. A winze sinking under the 84, about 6 fms. beyond the 94 end, will produce 10 tons of ore per fm. The 50 fm. level east is producing 2 tons per fm.—Engine Lode: A rise in the back of the 30 is worth 3 tons, and the winze sinking under the 20 produces 2 tons per fathom.—South Lode: The 42 east continues a good course of ore, worth 60l. per fm.—W. Roberts.

WEST CARADON.—During the past two months our tutwork department has been attended with an average amount of success, and we are happy to say that the improvements mentioned in our last continue to the present time, and bid fair to open a large quantity of very productive ground; and in presenting this report we can only recapitulate the leading points in our last—viz., Vivian's. In a winze sinking under the 92 the lode yields 3 tons of good ore per fathom; the 70 west yields 1 ton; the 60 west, 1½ ton; the 17, 2 tons; and the adit, 1 ton of ore per fm.—Dunstan's: The 104 west about 1 ton.—Kellow's: The 60 west, 3 tons; the 50, 3 tons; and the 38, 2 tons of very good ore per fm. On this lode we have a good length and height of ore ground laid open, it being to hole, with the exception of the levels and winzes for communication from the 60 to the 38, and above and below these points, consequently we are in search of it both in the 70 and the 27 fm. levels, with the expectation of soon reaching it at each point. Of the other parts of the mine, we may notice that Jope's lode in the 104 is large and spotted with ore, altogether a promising lode; and Clymo's, in the 104, is more encouraging, but not profitably productive, yet from the appearance of the lode we are in daily expectation of an improvement. Other prospective work is being prosecuted, as well as the shaftwork for the new engine. The engine-house and stack we expect to be completed in about a fortnight, and we calculate our next sampling will be from 350 to 360 tons of the usual quality ore.—R. Dunstan; H. Taylor; J. Eurza: Oct. 21.

WEST CRINNIS.—Extracts from the reports of Capt. John Webb, of St. Austell:—

*Oct.* 12.—I wrote you a report after coming from West Crinnis last evening, when I stated that we were expecting to cut South Crinnis caunter lode daily. I have now to inform you that we have done so; that is, we have reached it, and dug a hole into it 1 ft., but cannot tell its size or quality as yet; we can see some copper. It will require until Saturday afternoon, or the early part of next week, to get it thoroughly cut through, to report fully upon it. So far as I can see, I am well pleased.

*Oct.* 16.—I have now come up from underground, and find South Crinnis caunter lode cut through; its size is about 2 feet wide, of a promising character. We shall now commence to drive on its course. By prosecuting this lode I am of opinion that much copper will be found.

*Oct.* 18.—Since I last wrote we have taken down a little more of the caunter lode, and find it about 2 feet wide, containing some good copper ore, of a very promising character. It is my opinion that, by duly prosecuting this lode in depth and extent, we shall have a good mine, but it must not be taken for granted that the lode is rich where we have intersected it. The South Crinnis Mine is rich on the same lode, within a short distance of this mine. I mention this to show that the lode is a mineralised one, with every encouragement for exploring it.

*Oct.* 26.—I find on going to the mine to-day that the caunter lode is looking a little better. We are extending south-east on the caunter lode, to get under and communicate with the new south shaft, which we have just resumed sinking; this shaft is in the exact position for exploring on this caunter lode, although it cannot as yet be called a course of ore, yet I am pleased with its size, character, and general appearance. The stopes in the back of the 34 and 24 fm. levels are yielding ores just as for the last few months. The 34 end east has a better appearance than for some fathoms driving. The engine-shaft is down 3 fms. below the 34; bearers and cistern, and the new sinking lift, fixed and in good order. We sampled on Monday last, computed, 34 tons of copper ore.

WEST PAR CONSOLS.—We find in the 30 fm. level that the lode is intersected with a flat slide and cross-course, which causes the strata to be rather irregular, consequently the lode is only found in patches; we find, however, a great promise about lodes in the 45 we think it advisable to allow the 30 to remain until we throw some light on it by developing the 45. The beautiful stratum and great promise about the lodes are sufficient reasons to warrant our miners expressing the most sanguine opinions that this will (with a little perseverance) afford satisfactory results.—J. Wenn.

WEST POLBERRO.—I expect by the end of the present week the engine-shaft will be sunk to 20 fms. Nos. 1 and 2 stopes, in the back of the deep adit, on Callow lode, are worth 5l. per fathom for tin and copper. The end driving east, 8 fms. below the adit, under these stopes, is worth 14l. per fathom for tin and copper. The tribute pitch west of the shaft is yielding good stones of ore; all other departments are much the same as last reported. Our next sale of ore, I think, will exceed the last in quantity. The mine throughout is gradually improving.—T. Julian.

WEST SORTRIDGE.—The stamps are working well. I have delayed sending a report till the last moment, thinking I should have cut the Sortridge lode on the west side of the turnpike-road, but have not done so as yet. The ground appears to be very much disordered. The operations on the tin lode are progressing favourably.—John Pryor: Oct. 25.

WEST WHEAL JANE.—The engine-shaft is sunk 33 fathoms below the adit level; water same as last reported; sinking by eight men and four boys, at 26l. per fathom. The 30 fm. level is driven about 6 fms. east of Jones's shaft, the lode much the same as last reported; driven by two men and two boys, at 6l. per fm. The 30 fm. level, west of Jones's shaft, is driven 4 feet, the lode is 5 feet wide, composed principally of mundic, driven by two men and two boys, at 4l. 15s. per fm. In the stopes in the back of the 20 fm. level, east of Jones's shaft, the lode worth 8l. per fathom. The cross-cut is driven south of the 20 fathom level about 4 fathoms, driven by four men, at 4l. 15s. per fm. Tippett's shaft is sunk to the 30 fathom level; at the bottom of this shaft we have commenced driving a cross-cut to cut the lode, which we expect to cut in about 3 fathoms; driven by six men, at 9l. per fathom. The tribute department is looking well. The returns of tin this month will be the same as last.—Joshua Daniels; John Tregoning: Oct. 21.

WHEAL ARTHUR.—North Lode: The ground in the 50 west continues hard; the lode composed of capel, mundic, spar, and stones of copper ore. In the 35 west the lode is 5 ft. wide, worth 18l. per fm. The lode in Julet's stope, in back of the 35 west, is 3 ft. wide, worth 12l. per fm. The lode in Rook's rise and stope, in back of the 35 west, is 3 ft. wide, worth 12l. per fm. The lode in Knight's stope, in back of the 50, west of Palmer's winze, is 4 ft. wide, worth 12l. per fm.—Old Lode: The lode in the 90 east is composed of spar, capel, and spots of copper ore.—T. Carpenter.

WHEAL CARPENTER (South Sydenham).—The sinking of Bridgeman's engine-shaft under the 52 fathom level is progressing satisfactorily on the course of the lode, which is from 1 foot to 20 in. wide, composed of mundic, quartz, and flookan, intermixed with carbonate of lime. In the 52 fm. level east we have no improvement in the lode for the past month, and the ground being unsettled, we expect there is now but a short distance to extend this level to reach the cross-course, after which we purpose driving south on its course, in order to intersect the lode on the east side of it, in the direction of the shoot of ore going down in the 40 fm. level, which makes this an important trial for judging of the future prospects of this mining property. Gloyne's rise in the back of the 40 has been communicated to Cowling's stope. In Saunder's rise the lode is 2 ft. wide, yielding good stones of copper ore. There now remains a distance from 2 to 3 fathoms to communicate this rise to the 27, which when completed will lay open valuable tribute ground between the 40 and 27 fm. levels. This ground is some fathoms in advance of the 52 fm. level. In the 40 east and 52 west of shaft we have had no improvement in the lode for the past month, and the 27 fm. level cross-cut north is as yet without results. In the 27 east the lode is 3 feet wide, at present poor, but not without favourable indications; this end is many fathoms, in untried ground, in advance of the other levels. In the stope east and west of Pengelly's rise, the lode continues to decrease in value. In the 10 fm. level, east of shaft, the lode is 1 foot to 20 in. wide, containing good stones of copper ore of a kindly description. Stacey's pitch in the back of the 27 east continues to look well, set at a tribute of 9s. in 1l.; and Dorman's pitch in the back of the 40, at 13s. 4d. in 1l. We expect to have for November sampling upwards of 45 tons of copper, and have now ready for market from 6 to 7 tons of lead, and about 100 tons of jack, which we are likely shortly to dispose of.—Oct. 21.

WHEAL COATES.—We have commenced driving the cross-cut from the bottom of the western shaft, which is 30 fms. deep, and are in about 6 feet; the ground is harder than it was in the shaft; we have set 1 fm. to drive at 11l., to carry the level 6 ft. wide, which will serve for a plat; we have not met with any lode or branch yet, but from the underlie of the lode where it is seen shallow, it cannot be far to drive to cut it. I stated in my last letter that we thought it better to discontinue the driving the deep adit for the winter: since then in driving to the east of the cross-course we find the ground is so much altered that we have still left two men to open a little more through it, which we find to be clean white granite, without any water, and can drive in it for about 5l. 10s. per fm. This is a great change from what it was to the west of the cross-course. There is a large stream of water flowing from the cross-course, and nearly all of it coming from the south; this causes us to think there is a lode near at hand, and in order to prove it, we intend putting the two men now in the cross-cut, to drive a little in that direction, to see if it can be found, as probably we may be able to drive east on the course of it, by that means we shall be draining the mine, and also proving the lode, and if this kind of granite continues, I think there is a good chance of finding tin. The whiter and better the ground, the more productive it was found to be throughout the old mine.—Oct. 23.

WHEAL CREBOR.—The lode in the 54 end is large and promising, but not so orey at present as when taken down last, but it appears to be opening again, as it leaves a small slide, which disordered it at this point. The men have commenced driving the 44 end east; the lode is poor, where the last company stopped, but it appears to be caused by a split of the lode into two parts; I think they will form together again in a short distance driving. Our pitches in general are just the same as for some time past. I am not in a position, as yet, to inform you the exact quantity of ore we shall sample, as it will not be hauled to surface for nearly a fortnight, as the tributors' time will not be up until Saturday, which is our general setting-day for tribute and tutwork. I should calculate, as far as I can at present see, the quantity of ore we shall have will be fully as much as last, and probably some tons more, the price of which you are acquainted with, being the best for some length of time.—W. Doble.

WHEAL GOLDEN CONSOLS.—Engine-shaft: The sumpmen are getting on well in sinking under the 107 fm. level; in driving the 107 south it is without any alteration to notice.—Thorne's Shaft: I sunk 2 fms. 3 ft. under the 117 fathom level; the ground is moderate; the lode is 1 ft. wide, worth 7 ows. of ore per fm.; in driving the 117 north the ground is moderate; and the lode is 2 ft. wide, producing 1 ton of ore per fm. In the south ditto the lode has taken horse, and is unproductive at present.—Young's Shaft: In driving the 107 north the ground is good; the lode is 8 in. wide, producing 3 cwts. of ore per fm.—Webb's Shaft: In driving the 97 south the lode has a very promising appearance, but not rich at present. In the 87 ditto there is a good lode 20 in. wide, producing 15 cwts. of ore per fm.; and when Maxwell's shaft is holed to this level, we shall have several new pitches to set, but it cannot be done before; therefore, we must have patience until the ground is laid open.—Maxwell's Shaft: We expect to hole to the 87 this month. The tribute department is not quite so good as we anticipated. We intend sampling, on Wednesday next, 50 tons of silver-lead ores.—J. Williams: Oct. 23.

WHEAL FRIENDSHIP (St. Hilary).—This mine is situated a very short distance to the north-west of Halamanning Mine, and immediately to the west of Guskus Mine. Several east and west lodes traverse the sett. On the course of the lodes the sett is from 700 to 800 fms. in length, and in breadth from 500 to 600 fathoms. One of the lodes in a former working was wrought very extensively, and very large quantities of copper and tin ores returned therefrom. To the north of this, on another lode, an engine-shaft has been sunk to the 70 fm. level. In the bottom of this level, for a considerable extent, it was reported to me that the lode is worth 40l. per fm.; this is said to be almost immediately to the west of the engine-shaft. The principal workings of the present company have been confined to the eastern part of the sett, on this lode, and are all east of the engine-shaft; the extent of these workings reaches from the eastern boundary to about 50 or 60 fms. west of it. A shaft has recently been sunk near the eastern boundary from surface to the 10 fm. level below adit; the adit is upwards of 20 fms. in depth. There are several other shafts sunk on this lode to a good depth; this was done in a former working, and are now available to the present proprietors, for the future working and development of the mine. This will also save a large outlay, which must otherwise have been made for the due prosecution of the mining operations. The lode, as now seen in the levels and pitches recently explored in the eastern part of the sett, is of considerable promise; its present character is such as to deem it rather a certainty than a speculation; the lode is well defined, varying from 1 to 2 ft. wide, and is richly charged with copper and tin ores; the gossan, which is of a beautiful nature, has not yet disappeared, and it also contains small portions of quartz, blende, and mundic. There are, between the adit and 10 fm. level, four pitches working on tribute, two at 5s. in 1l., one at 7s., and one at 9s.; these are all working without the aid of a steam-engine, and leaving an average profit to the adventurers, on the underground operations, of upwards of 12s. in 1l. Few and far between are mines to be found of such a character so shallow, and at such a recent date of operations. And providing the lode continues from the 10 fm. level to adit, as it now appears for the extent driven, there are several thousands pounds worth of ores that can be taken away without any other cost than that of breaking and drawing to surface. The lode is surrounded by a stratum of light killas, perfectly congenial to the existence of large courses of ores, and is also very fair and clear for exploration. Some of the richest parts of the lode, which were worked on tribute at 4s in 1l. to the bottom of the 10 fathom level, only await the erection of an engine for deeper and profitable development. The production of this lode for copper and tin, at such a shallow depth, indicates an abundance of mineral wealth below. Promising as is this eastern section of the lode, it is my opinion that it will not equal that section of the lode ranging to the west of the engine-shaft. From the eastern to the western boundary there is a gentle inclination of the surface, the eastern part being the most elevated; the strata and ores also dip west. From the geological confirmation and nature of the sett, and the nature of the lode as exhibited in the present workings, I infer that the middle and western sections of this lode are embedded in a rich mineral channel of ore-bearing ground, and that subsequent explorations will justify its rank among the best mines of Cornwall. From the recent operations, samplings of various parcels have taken place, producing several hundreds of pounds worth of ores. A new and substantial engine-house has lately been built for the erection of a 70-inch engine. There is also a commodious counting-house, smith's shop, material-house, sheds for dressing ores, and various materials on the mine, which altogether must have cost a considerable sum of money; but, at the same time, are essentially necessary. There are other lodes in reserve, which, doubtless, will become very valuable on a fair trial. The engine should be erected forthwith, and explorations carried on both east and west of the shaft on the course of the lodes. I do not hesitate to affirm, as my opinion, if the proprietors will invest sufficient capital for the erection of necessary plant to drain the water from the bottom of the mine, and open up the reserves of ore ground, that under a judicious and economical management, the most profitable results in due course of time may be expected, and that it will prove a concern at once beneficial to the public and highly remunerative to themselves.—T. Hooper: Oct. 21.

WHEAL JAMES.—Since I last reported, we have drained the water from the 20, at Prockter's shaft, and have properly repaired the damage sustained by the water being in so long a time. We shall commence to break ore to-morrow, having taken on a sufficient number of hands to raise large quantities of ore from these levels. In the stopes in the 10 the lode is still very productive, being worth 20 tons of ore per fm., of a good quality. I will report more fully in a few days.—Capt. Grose: Oct. 24.

WHEAL GUSKUS.—Our prospects here are more cheering. Martin's lode in the 20, west from Reed's shaft, is 10 in. wide, worth 9l. per fm. for tin; this lode in Rapson's shaft, sinking from the adit to the 10 fm. level, is 1 foot wide, worth 6l. per fm. for tin and copper. The lode in the winze sinking from the 40 to the 50, on Guskus lode, is 2 ft. wide, worth 20l. per fm. for tin.—Oct. 21.

WHEAL KITTY (St. Agnes).—The lode at the engine-shaft, below the 54 fm. level, is 2 ft. wide, producing good stones of tin; the lode in the 54, east of the engine-shaft, is 2 ft. wide, worth 15l. per fm. The lode in the 44, east of the engine-shaft, is 2½ ft. wide, worth 8l. per fm. The lode at Sunny Corner shaft, below the 24, is 1 ft. wide, producing stones of tin. We shall have finished clearing and securing the 12 east of Sunny Corner shaft the latter part of next week. In the past week we set two new bargains: one to four men, to cut a trip plat west of Holgate's shaft, in the 54; the other to two men and two boys, to drive north on the western cross-course, in the 24.—T. Bray: Oct. 21.

WHEAL MAUDLIN.—The water in the engine-shaft is got below the back of the 16 fm. level, so that I hope soon to be able to get into that level again. I have heard nothing as yet about the samples of mundic sent away. In the costeaning there is nothing new to report this week. In the adit at Hele, we have cut a branch 1 foot wide, composed of quartz and schorl, with a very small portion of tin.—W. Tregay.

WHEAL ROBERT.—The lode in driving west is increasing in size; it is 3 feet wide, and presents much the same character as last reported, producing copper ore and mundic, but not enough to save. Judging from the short distance we have driven west, we have every reason to expect a greater improvement.—W. Neill.

WHEAL SAMSON.—We have cut a branch in the bottom of the shaft dipping towards the lode, of a most promising character; it is composed of white iron, barytes, and soft spar, with spots of lead.—J. Spargo.

WHEAL SURPRISE.—The lode in the 23 east is about 3 feet wide, producing a little ore, but not to value. The stratum is very congenial for copper, and very favourable for driving; present price, and to pay all costs, 2l. 5s. per fm. These indications give us every reason to expect large quantities of copper ore round or about the cross-course. No alteration in the 33 since last report.—A. Bray: Oct. 26.

WHEAL TEHIDY.—We have completed the dividing and fixing the lift in perpendicular shaft, which I mentioned last week, and are going on sinking. In the diagonal shaft, and the levels driving, we have but little alteration to notice since my last report.—D. Lanksbury: Oct. 21.

WHEAL TREBARVAH.—Since our last report we have recommenced to sink the flat-rod shaft under the 40 fm. level, the lode being about 18 in. wide, worth 12l. per fathom for copper ore. The lode in the end of the 40 east is 1 ft. wide, worth 5l. per fathom. The lode in the end of the 30 fm. level east is about 10 in. wide, yielding some good ore. The lode in the end of the 20 fm. level west is still unproductive.—Matthew White; Stephen Osbourne: Oct. 24.

WHEAL TRELAWNY.—Smith's shaft is sunk 2½ fathoms below the 108 fathom level, ground a little more favourable for sinking. We have just intersected the lode at the 108 fm. level, but are not yet through it; it is producing good lead and fluor-spar. In the 98 fm. level, north end, the lode is 2½ ft. wide, worth 5l. per fathom; in the same level, south end, it is 1 ft. wide, worth 7l. per fm. We are still driving by the side of the lode in the 88 fm. level, north end. In the 78 fm. level, north end, the lode is 2 feet wide, worth 5l. per fm. In the 55 fm. level, north end, the lode is 1 foot wide, worth 7l. per fathom. Chippendale's shaft is sunk 5 fms. 4 ft. below the 78 fm. level, where the lode is 2 ft. wide, worth 8l. per fathom.—South Mine: In the 120 fm. level, south end, no lode taken down since last week. In the 107 fm. level, south end, the lode is 3 feet wide, worth 12l. per fm.; the lode in the rise in the back of this level is 3 ft. wide, worth 16l. per fm. In the 92 fm. level, south end, the lode is 3 ft. wide, producing about 15 cwts. of copper ore per fm.; in the winze sinking in the bottom of this level the lode is 2 ft. wide, worth 10l. per fm. The stopes and pitches are much as usual.—J. Kemp: Oct. 24.

WHEAL UNITY.—The lode in the 82 fm. level east continues upwards of 5 feet wide, and still producing a little tin. The stopes in back of the 70 east are still looking well, and producing a fair quantity of tin. All our other operations are without any material change since last week.—Wm. Thomas: Oct. 23.

WHEAL VENTON.—Since the last general meeting, the south end has been extended on the course of the branch 13 fms. 3 feet, which, I regret to say, has not been so productive as I at one time anticipated it would be; we then had a good branch of lead, producing about 7 cwts. to the fathom; this held on about 2 fms., when we intersected a slide, which has quite disordered the branch, and the stratum of ground is altogether changed, but which, I hope, will alter very shortly, and the branch again form its regular size and character. We have, also, driven north at this level 5 fms. 2 ft., where the ground is still easy for driving, and the branch, now about 6 inches wide, very regular, and producing a little lead. This I consider a very promising end, and should recommend its continuance, as well as the south end, where we have reason to expect very shortly, as we get a little further off from the slide, a change in the ground, when I think the branch will again form itself more regular.—W. George, Jun.

WHEAL WREY CONSOLS.—As I was unable to send you the particulars of the lode cut in the 23 fm. level in this mine in my report for your Journal last week, I beg herewith to send you a general report of the present state. The engine-shaft is sunk 10 ft. under the 23 fm. level. The lode in the 23, north and south, is 4 ft. wide, producing 8 cwts. of lead ore per fm.; the ground being easy for exploring, we have extended 3 fms. on its course. The lode in the 12, north of the engine-shaft, is 2½ ft. wide, producing 3 cwts. of lead per fm.; in the same level south it is 1 ft. wide, producing 3 cwts. of lead per fm. In a winze sinking under the 12 south it is 2¼ feet wide, producing 7 cwts. of lead per fathom. The stopes are, on an averge, producing much as usual.—P. Clymo, Jun.: Oct. 26.

WHEAL ZION.—The lode in the engine-shaft, below the 66 fm. level, is looking exceedingly promising, producing splendid stones of ore. The lode in the 66 fathom level, east and west, is producing good stones of ore, with large masses of mundic; I fully anticipate, from present appearances, that we are near a course of ore. In the 50 fm level no lode taken down in the past week. In the 30 cross-cut south there is no alteration to notice. We shall sample, on Friday next, at Calstock Quay, about 36 tons of ore.—James Bray: Oct. 25.

## FOREIGN MINES.

### LINARES MINING ASSOCIATION:—

*Pozo Ancho, Oct.* 16.—The engine-shaft, sinking under the 75 fm. level, is just as last reported.—West of Engine-shaft: The lode in the 75 fm. level is worth ½ ton in a fm. The lode in the 65 fm. level, west of Caballeros winze, is worth 1½ ton of lead ore per fm. Romeros winze, sinking under the 55 fm. level, is worth 2 tons of lead ore per fm. The lode in the 55 fm. level, west of Casualidad winze, is unproductive. The north lode in the 45 fm. level, west of ditto, is unproductive. In the 20 fm. level, west of Warne's shaft, the men are still in old workings. There is an arch standing in the back, with a good branch of lead, so that we hope to find a productive lode under the old workings. The 15 fm. level, driving east from Victoria shaft, and the intermediate air shaft now sinking, are each worth ½ ton in a fm.; and the lode driving west from San Francisco is worth 1 ton in a fm.—East of Engine-shaft, on South Lode: We have yet nothing new to report in the 75 fm. level and the cross-cut. The lode in the 65 fm. level, east of Cortez winze, is worth 4 tons in a fm. The lode in the 55 fm. level, east of Fernandez winze, is worth 1 ton in a fm. The lode in the 55, west of Rodriquez winze, is worth 1½ ton in a fm. The lode in the 45 fm. level east of Thorne's shaft, is worth 2 tons of ore per fm. The lode in Estebaris winze, under the 45 fm. level, is worth 1½ ton per fm. The lode in Compans winze, under the 31 fm. level, is worth 3 tons per fm. The lode in the 31 fm. level, east of Thorne's shaft, is worth 1 ton of ore per fathom. The lode in the 20 fm. level, east of Thorne's shaft, is worth 1 ton per fm. In the cross-cut driving from Taylor's shaft to this lode nothing has occurred to notice.—Middle Lode: Sanchez winze, under the 45 fathom level, is worth 1 ton per fm. The lode in the 45 fm. level, east of Thorne's shaft, is worth 1 ton per fathom. The lode in San Martyn's winze, under the 31 fm. level, is worth 1 ton per fm. The lode in the 20 fm. level, east of cross-cut, under the 31 fm. level, is worth ½ ton per fathom.—North Lode: The lode in the 45 fm. level, east of Thorne's, is now worth 1 ton per fm., and improving in appearance. The lode in the 45, west of Thorne's, is worth 5 tons per fm. The lode in Galeros winze, sinking under the 31 fm. level, is worth 3 tons per fm. The lode in the 31, east of Taylor's shaft, is worth 1½ ton per fm. We are completing the water-wheel and crusher.

### MOSELLE MINING COMPANY:—

*Oct.* 27.—I trust that this report will be published, as, I have seen by the *Mining Journal*, has not been the case with some of my last. It is but justice done to myself to keep the shareholders informed of the state of their fine property, and what has been done with it. I have brought this report with me, having come across expressly to give any explanations that may be required, and in the expectation that a meeting might be called to enable me to do so. The mines now working form four distinct setts, as my former reports have shown, each of which indicates promise enough to deserve separate attention; and to do justice to all, each should be manned and worked with adequate energy.

Maria.—The winze is now 8 fms. down, the ore improving daily, and may now be taken at 4 tons per fm. By the end of the year we shall be deep enough to let us commence our levels, and make way for stoping out the high backs, both east and west. In the course of a few months, it will take at least 40 men to work this part of the property as it ought to be done, in order to reap the profit prepared. The Franz and Augusta shaft is also down 8 fms. from surface. We have gone through one course of ore, worth 50l. per fm., and have just cut a second lode, the size of which is not quite ascertained, but which, as far as we have gone, is at least worth 60l. per fm. In the level driven east on the first lode we are going down on a course of ore worth 20l. per fm. This level having been driven 20 fms. to this winze, without taking for ore that did not lie in our way, the whole of this course is there to be taken out, as soon as we have sunk to the proper depth to allow of regular stopings.

At Emma, there is orey ground to be stoped away.

At Emilia, there are stopes standing which will pay well; they may be taken away for 2s. in 1l., and a considerable quantity of ore is already at surface. In Snell's deep adit, in this district, we are driving on the course of a very promising lode, and expect, in the course of a few fathoms driving, to intersect the main lode, when good returns may be expected—perhaps as large as from any other part of the ground. The elevation of the hill over this adit is at least 1000 feet, the adit being driven from near the level of the stream. On the temporary dressing-floors, constructed until the official formalities required for our large floors were gone through, we have dressed 30 tons of ore ready for sale, and should have done more, but that the scarcity of water impeded us. To prevent this in future, by providing a regular supply of water for the large dressing-floor, we have, during the last two months, constructed a large dam, which is almost completed. The large dressing-floor is in a state of forwardness, 112 feet square of ground being walled in for roofing, to allow of the washing being carried on without impediment from the winter snow, which is here severe. The roofing will be completed by next month, and will enable us to dress ore all the year round. It covers the crushers, stamps, and every other part of the floors, and when completed, may be allowed to speak for itself. It includes substantial smiths and carpenters' shops, as well as an agent's house and offices, with good stables. To say that so much ground has been laid open, and such works erected, at a cost of less than 40,000*l.*, including salaries, outlay for wagon and horses, &c, it appears to me to give a good account of nine months' work.—Alfred Jenkin.

**THE NOUVEAU MONDE GOLD MINING COMPANY.**—Advices have been received from Mr. J. Arthur Phillips, dated Mount Ophir, Sept. 8, 1854, of which the following are extracts:—The mining operations on the Poncho vein have been continued, with what, on the whole, may be considered satisfactory results. The shaft at the eastern extremity of the vein has been sunk to the depth of 30 ft., and the lode in the bottom has become more regular and better defined, but has not yet shown any gold. On the western extension of the lode, in the direction of Green's Gulch, three separate shode-pits have been sunk, and about 25 tons of quartz extracted. The average width of the veins in these several workings may be estimated at about 2 ft., but it appears not only to be subject to considerable irregularity in thickness, but also to form numerous splices, at some of which, for a short distance, the lode almost disappears. The distance of the most eastern shode-pit from the more westerly one is about 300 ft. Good specimens of gold have been obtained from each of these workings, and the character of all the rock broken may be considered as promising. In the most westernly working, a rich pocket of gold-bearing quartz, 15 ft. in length, 13 inches in width, and 3 feet in depth, has just been discovered. The quartz from this spot is some of the best I have seen in this country; but being at the present time without a supply of fluxes for assaying, I am unable to state its exact tenure in gold. I, however, hope to receive all the necessary re-agents in the course of a few days, and will then pass some of the ore through the crusher; and after making careful assays, will proceed with their amalgamation. The portion of the lode to which I refer as rich will be worked separately; but we shall also sample, assay, and amalgamate ores from the different other workings. Under these circumstances, and in accordance with the instructions contained in your recent letters, relative to any "really promising locality," I have taken steps for the acquisition of 4800 ft. of the vein, at a royalty of one-fifth the gross gold obtained. I shall, however, keep the matter entirely open, until I have made the necessary assays and experiments, and received the despatches due by the next mail from England. No purchase-money would in this case be required; and my present impression is, that this is a promising locality. New machinery would, however, be required, since with that now at Mount Ophir, no profit could be obtained, except from quartz much richer in gold than the probable average of that found in the vein in question. A good locality for the erection of such machinery is to be found within about half a mile of the present workings. I would, however, remark, that to get up the necessary machinery from San Francisco, and erect it on the mines, considerable expenditure of capital would be necessary. During the month of August 17 tons of quartz, from Captain Williams's vein, have been crushed and amalgamated at the Mount Ophir Reduction-Works, and afforded an average yield of about 2 ozs. of fine gold per ton of ore.

### THE WILDBERG GREAT CONSOLIDATED MINES:—

*Oct.* 20.—East Mines.—The Weitung stopes, in the back of the 20 fm. level, east of Michael's shaft, will produce 4 tons of silver-lead ore per fathom. The Unverhoffteegluck lode, driving east, will produce 3½ tons and the stopes 5 tons per fm.

West Mines.—The Blumengang lode, driving east from the winze, will produce 12 tons and the stopes 11 tons per fathom. The lode driving east from the south cross-cuts, in the deep adit level, is improved since my last report; it will now produce 3 tons per fm., and has every indication of further improvement. On Monday next we purpose putting four men to drive west from the south cross-cut, on the same lode; the lode presents a very favourable appearance, and I have not the least doubt, in driving a few fathoms on its course, that we shall meet with a good branch of lead. Carter's engine-shaft is sunk from the surface 29 fms. 1 ft. 5 in.; it is still in crushed ground, and requires careful timbering, therefore it keeps us from making greater progress in sinking. The slating of the roof of the smith's shop is in hand, and will be completed by the end of next week. The walls of the carpenter's shop will be ready for the timberwork of the roof in the course of next week. The walls of the engine-house will be ready for timberwork of the roof by Thursday next. The large new barrack will be ready for the shell by the latter part of next week. We have commenced metalling the new road between Bergerhof and the smelting-works, and if the weather continues fine, it will completed by the end of next week. One of the new reservoirs at the head of the village is completed, and one-half of the ground of the second is taken out.—J. M. Champion.

Advantages of Joint-stock Enterprise—Foreign Vineyard Association.—This company has been formed with the object of carrying out, with all the advantages which capital legitimately employed will always confer, some valuable contracts, made by the promoter, Mr. Thos. Wesney Stapleton, for the entire produce of the vineyards of several large landed proprietors in the wine districts of France, and also for the supply of champagne, sherry, and other wines, upon which, from the opportunities and facilities possessed by the company, a large return to the shareholders may be fairly anticipated. The successful results of the private trade of the promoter, over a period of 14 years, and the increase of his business to the full extent justified by his capital, led to the conviction, in the minds of many noblemen and gentlemen in his connection, that the application of the joint-stock principle of trade to this important branch of commerce must, if carried out with a proper spirit of enterprise, prove a highly lucrative undertaking. The company was accordingly formed; a deed of settlement obtained, limiting the liability to the amount of shares; all purchases will be made for cash on delivery; and all statements as to assets, liabilities, general accounts, trade, and profit, will be open to the shareholders. Some idea of the wide field which presents itself for the operations of this company may be formed from recent parliamentary returns, which show the consumption of foreign wines in this country to be 5,000,000, and spirits 30,000,000 gallons, representing a money value of 25,000,000*l.* sterling. The first ordinary general meeting was held at the offices, King-street, St. James's, on Thursday (the Right Hon. Lord Muskerry in the chair), when the statement of accounts showed a profit, on the first three months of the company's transactions, ending 31st Aug. last, of 327*l.* 16s. 7d.; and a balance on share account in favour of the company, 20,556*l.* 12s. 10d. Mr. Stapleton, the manager, read the directors' report, which congratulated the proprietors on the present position of the company. A deputation had visited the vineyards, which were in a most satisfactory and cleanly state. The contracts were for the entire produce for a period of ten years, at a fixed price; and having been entered into previous to the recent general failure of the wine crops in France, it was justifiably anticipated that very large profits would be the result. During the short period of the company's business, a profit equal to 17 per cent. per annum had accrued on the capital, notwithstanding the pressure of many expenses which would not occur again, from which the directors recommended a dividend equal to 6 per cent. per annum, payable on the 14th November. The report and accounts were unanimously adopted. Mr. Stapleton addressed the meeting, congratulating them on the success so far attained, explaining the measures necessary to be adopted for that extension of business which was the principal object of the company, and endeavoured strongly to impress upon the minds of the directors, and all interested, the absolute necessity of extensive publicity through the medium of the press. Dr. Beattie wished it to be understood that a company so short a time in the field could not have attained the position they occupied without a foundation to work upon; they had the whole of the promoter's connection transferred to them, and their object now was to extend their business to the very extent their capital would allow. A perfectly unanimous expression of confidence was manifested by the meeting in Mr. Stapleton, and a suggestion submitted, as a recommendation to the directors, to take measures with the manager for advertising the objects and prospects of the company in a spirited manner. Thanks were voted to the chairman and directors, and the meeting separated.

All the *matériel* of the submarine telegraph destined to unite Elsinore, in Denmark, with Helsingborg, in Sweden, has arrived from England in the latter place, and the laying down of the cable containing the electric wires has commenced. The distance is about 5¾ miles. When completed, Stockholm, which is in 59 degrees 20 minutes north latitude, will be in direct communication with Milan, and with all the electric lines of Denmark, Germany, Belgium, and France.

Madame Tussaud's Exhibition.—The Exhibition has just received the addition of an object of much interest: it is the portrait model of Lieut. Perry, late of the 46th Regiment. The likeness of this gentleman is admirable, and will, no doubt, long remain an object of great public interest and curiosity. Many novelties are, we hear, in preparation.

## MINES AND MINING.—SECOND SERIES.—No. V.

BY EVAN HOPKINS, C.E., F.G.S.

There are few things that shock the moral feelings of an ordinary well-conducted Englishman more than any open, undisguised form of gambling, yet England, after all, is the most gambling country in the world; and mining speculators, and some of our merchants, the worst gamblers in it. Indeed, it is not fair to the honourable gentlemen of the roulette table to call the system carried on by some mining managers "gambling." The former risk what they have by fair dealings, and the sentiment of honour is the very bond of their society; whilst the latter risk nothing, but deliberately unite together to concoct false representations, for the purpose of obtaining money from the public, regardless of shame or honourable principles. The public can easily guard themselves from the evils attending the avowed gamblers, but not so against the wholesale "doings" of the directors and committees of some mining companies. The characters who carry on these schemes, look like sober-minded men, of grave conversation, attentive to their spiritual duties, members of the societies for the suppression of vice, lotteries, &c., but, nevertheless, with a conscience unhurt, and with an unshaken opinion of their virtue, they are guilty of meeting together periodically, simply to contrive schemes by which the unwary capitalists may be robbed of their money.

Some time ago we heard how an Hibernian mining captain signed his name to reports dictated and written in London, which he knew were false. This week we are made acquainted with still more glaring deceptions and forgeries by the so-called committees of management (see last week's *Mining Journal*) under the head of "More Mining Frauds,"—"The bankrupt, Mr. Prockter, was examined at considerable length by Mr. Gurney, relative to certain mining transactions in which he had been engaged. In the cost-book, which was produced, it was stated that at the general meeting of the adventurers," &c., "it was resolved," &c. "The bankrupt said there was no meeting of the sort ever held. He was persuaded by a gentleman connected with the mines to enter this" &c., "The names attached were not the signatures of the parties!" "They were not present, a mining gentleman had told him that was the way to do it. (Sensation.)" It was proved on examination that all the other meetings were similarly concocted, with forged signatures. The Commissioner very properly remarked, "That it could not be possible that the law could recognise such a course." Although this is truly shocking, and worse than pickpocketing, yet it is only a mere example of what is, unfortunately, often carried on under the name of a committee of management. We know it is of little use to expose old and daring speculators of this class, and perhaps not much use to warn those who seldom exercise due caution before investing their money in questionable schemes, but there are others who will have to bear the brunt of these iniquities, if they do not take care.

Had it not been for a number of gentlemen lending their names, and making mock attendance at boards and committees, to wink at what they see going on, such schemes could not continue as they have done. A circle of respectable names shelter these proceedings from the inquisitive eyes of the world. "It is in this class," says the *Times* in an able article on the subject, "and it is this degree of complicity that the most plausible and most dangerous form of gambling consists. Why do they assist a career that they would not enter upon themselves? This is gambling, and worse than gambling; and when people in this country vent their virtuous indignation against avowed gamblers, it would be well if they ask themselves whether they have not, occasionally, aided and abetted at frauds far worse than a mere throw of the dice." The promoters of some of the deceptive companies never would have dared to carry on their proceedings to so destructive a pass but for the countenance and aid of other men of more substance and character. Besides the above deceptive concoctions, there are other most lamentable and dangerous tricks played, which are almost beyond belief. The promoters of some companies are not only able to secure the countenance and sanction of their colleagues, and get agents to sign their reports, but they seem to possess such a power over the nerves and minds of those whom they have in their employ, as to make them not only sign simply false documents to gull the public, but also criminal statements which they know to be so. Thus a host of individuals become compromised, and placed in a very unenviable position; and, indeed, degrading to humanity, from the want of sufficient firmness of principle to resist such iniquitous proceedings. When we find these things carried on with such impunity in our home speculations, what are we to expect from foreign speculations, carried on by similar parties, with so pliable and accommodating agents?

WANT OF LEAD AND SULPHUR IN RUSSIA.—The Russian Government is employing scientific men in several provinces of the empire on a search for lead mines, for sulphur and coal. Others are employed in causing old and neglected mines to be worked again. The Russians know that Finland, when it belonged to Sweden used to yield lead in abundance. The abandonment of the mines was a consequence of the cheapness of the article in the foreign market, rendering competition unprofitable. The Russian Government returns now to its own mines, and hopes to extract from them a large produce. Such is the scarcity of lead at this moment in Russia, that its price, formerly 1½ rouble per pound, has now risen to six silver roubles. It is the same thing with sulphur, that has become quite scarce, on account of the blockade, and as this material is peculiarly a contraband of war, it can no longer be conveyed into the empire from neutral countries.

PHILLIPS'S LIQUID METAL PURIFIER.—We have on several occasions called attention to the discovery of a liquid substance for improving the quality of iron and other metals during the melting process, by Mr. Phillips, of Kennington-lane, and we are now enabled to give the results of some experiments made at the Royal Dockyard, Woolwich, under the superintendence of Mr. Atherton, chief engineer, and the sanction of the Admiralty. The first set of experiments showed such irregular variations, and some of the bars were so defective, that we pass them over. On a second trial, three experiments with the purifier gave a longitudinal strain in tons, 15¼, 18¾, and 22¾; and without, 15¼, 14, and 22¼ respectively. Transverse in cwts. with the purifier, 12½, 13, 13⅛, 13⅛, 13¼, 12½; and without, 12⅛, 13⅞, 9⅝, 12¾, 13, 11½ respectively. A summary of these experiments may be taken as representing a cohesive strength in tons with the purifier, 56¾; without, 51⅛; and transverse strength in cwts. with the improved method, 78¼; without, 73⅛; or about 9¾ and 7 per cent. respectively in favour of the discovery. We by no means, however, consider these trials conclusive, and think it would be highly judicious on the part of the Government authorites to institute an elaborate series of experiments, with the view of arriving at correct results. There is evidently considerable effect in the substance employed, and its true chemical action under all circumstances ought to be rigidly tested. We have received a communication from a "Constant Reader," but the above remarks preclude the necessity for its insertion.

SORTRIDGE CONSOLS—(*From a Correspondent*).—The projectors of this fortunate mine, which is about to sample on Friday next 160 tons of very rich copper ore, have obtained the Plasterdown sett, adjoining North Robert and Sortridge, which are in a most prosperous state. This excellent piece of ground has been obtained by J. H. Hitchins, Esq., and friends. Men have commenced working, and opened on one of the lodes, which is very large, and producing great quantities of gossan, greens, and spots of grey ore. Several shallow pits and shafts were put down about eight years since, and about 1200*l.* expended, which have been paid for by the new company. There is more than a mile on the course of the lode. The channel of the ground is very congenial—being a beautiful soft light-blue killas and flookan by the side, and about a mile from the granite ranges. Looking at the locality, and its present indications, there is no doubt this will become another good and lasting mine. The company intend putting up an engine to develope its resources.

THE TAMAR MARIA MINE.—A large shareholder having requested Mr. T. Cocking, the agent of the Latchley Consols Mine, to inspect this property, he reports as follows:—The adit level is driven south on a cross-course about 80 fathoms—in driving which two east and west lodes have been intersected, about 40 fathoms apart. No. 2 lode is 2 feet wide, inclining north 3½ feet in a fathom, and composed of capel, spar, and gossan. No. 3 lode is 1 foot wide, inclining north 4 feet in a fm., composed of hard capel. According to Captain Davey's survey, there is still 3 fms. further to drive to out No. 4 lode, which is, according to its horizontal bearing, a continuation of our main lode; and the intersection of which, according to the acclivity of the hill, will be about the depth of our 20 fm. level, which will give a back in Tamar Maria of 35 fms., at which point I have not the least doubt but that the lode will be found productive—being accompanied with a light mineralised killas, similar to that we have in Latchley Consols, and superior to what has previously been driven through in the adit level.—Oct. 25.

AVE MARIA GOLD MINING COMPANY.—From time to time the shareholders in this association have expressed great dissatisfaction that they have been unable to obtain any accounts or information from the directors. It must be remembered that this was one of the companies on the Cost-book System, and marked on the Official List of the Stock Exchange. Mr. O'Connor, the agent, has arrived in this country, from California, and is desirous of meeting the proprietary, and giving them the fullest information on the present position and future prospects of the company; and, as far as he has been connected with the enterprise, to afford such facts as a proper and just conclusion can be arrived at. In order to effectually carry out Mr. O'Connor's views, it would be advisable that the shareholders should, as early as possible, appoint a committee to act in concert with that gentleman, who is anxious that the truth should be known.

STOCKTON IRON WORKS.—Three blast furnaces have made their appearances, rising above the verdure of the quiet fields, and are rapidly progressing; and during the last two days surveyors and engineers have been at work planning and marking out sites and allotments for two other companies, who are about to erect three furnaces each. There are other companies under negociation for land in the borough. These erections are to be upon the Portrack estate, and on the north side of those that are building. A great demand is likely to be made for materials for building, and exertions are being made on a large scale by the brickmakers in the neighbourhood to meet the demand.—*Sunderland Herald.*

## The Mining Market; Prices of Metals, Ores, &c.

*METAL MARKET, London, Oct. 27, 1854.*

| | | £. | s. | d. | | | £. | s. | d. |
|---|---|---|---|---|---|---|---|---|---|
| COPPER. | | | | | QUICKSILVER.....p. lb. | | 1 | 11- | 2 0 |
| Sheathing and bolts ..p. lb. | | 0 | 1 | 2 | SPELTER. | | | Per Ton. | |
| Bottoms ..... | ,, | 0 | 1 | 3 | Foreign ..... | 25 | 0 | 0- | — |
| Old (Exchange) ..... | ,, | 0 | 1 | 0½ | To arrive..... | 24 | 15 | 0- | — |
| Best selected .....p. ton | | 129 | 0 | 0 | SINC. | | | | |
| Tough cake ..... | ,, | 126 | 0 | 0 | In sheets..... | 30 | 0 | 0- | — |
| Tile ..... | ,, | 126 | 0 | 0 | TIN. | | | | |
| South American ..... | ,, | 120 | 0 | 0 | English, blocks .....117 | | 0 | 0- | — |
| IRON. | | | per Ton. | | Ditto, Bars (in barrels) 118 | | 0 | 0- | — |
| *Bars, Welsh, in London. | | 10 | 0 | 0- — | Ditto, Refined .....121 | | 0 | 0- | — |
| *Ditto, to arrive ..... | | 9 | 10 | 0- — | Banca .....116 | | 0 | 0-117 | 0 0 |
| *Nail rods ..... | | 11 | 0 | 0- — | Straits .....114 | | 0 | 0-115 | 0 0 |
| * ,, Stafford. in London | | — | -13 | 0 0 | TIN-PLATES.† | | | | |
| *Bars ditto | | 11 | 10 | 0-13 | 0 0 | IC Charcoal .....p. box | 1 | 13 | 6- 1 15 0 |
| *Hoops ditto | | 12 | 5 | 0-14 | 0 0 | IX Ditto ..... ,, | 1 | 19 | 6- 2 1 0 |
| *Sheets, single ..... | | 13 | 0 | 0-14 | 10 0 | IC Coke ..... ,, | 1 | 7 | 6- 1 8 6 |
| Pig, No. 1, in Wales ... | | 4 | 15 | 0- 5 | 0 0 | IX Ditto ..... ,, | 1 | 13 | 6- 1 14 6 |
| Refined metal, ditto..... | | 5 | 0 | 0- 5 | 10 0 | Canada plates .....p. ton | 15 | 0 | 0-15 | 10 0 |
| Bars, common, ditto ... | | 8 | 0 | 0- 8 | 10 0 | In London; 20s. less at the works. | | | | |
| Ditto, railway, ditto ... | | 7 | 5 | 0- 7 | 10 0 | | | | |
| ditto, Swedish, in Lond. | | 13 | 0 | 0-14 | 10 0 | Patent Yellow Metal Sheathing (Muntz) .....p. lb. | | 0 | 1 | 0 |
| Pig, No. 1, in Clyde..inf. | | 4 | 1 | 6- 4 | 2 6 | Wetterstedt's Pat. Met.... p.cwt. | | 2 | 2 | 0 |
| LEAD. | | | | | | Stirling's Non-laminating, or Hardened, Surface Rails..p. ton | 9 | 0 | 0- 9 | 2 0 |
| English Pig ..... | | 23 | 0 | 0-23 | 10 0 | | | | | |
| Ditto sheet ..... | | 24 | 0 | 0- — | | Stirling's Patent Toughened Pigs Glasg. | — | | - 5 | 5 0 |
| Ditto red lead..... | | 24 | 0 | 0- — | | Ditto Wales | 4 | 0 | 0- 4 | 5 0 |
| Ditto white..... | | 27 | 10 | 0-30 | 0 0 | Indian Charcoal Pigs in London ..... | — | | - 6 | 1 0 |
| Ditto patent shot ..... | | 26 | 10 | 0- — | | | | | | |
| Spanish, in bond ..... | | 22 | 5 | 0-23 | 0 0 | | | | | |
| American..... | | | none. | | | | | | | |
| FOREIGN STEEL. | | | | | | | | | | |
| Swedish, in kegs..p. ton | | 17 | 0 | 0-18 | 0 0 | | | | | |
| Ditto, in faggots ..... | | 18 | 10 | 0-20 | 0 0 | | | | | |
| English, Spring ..... | | 23 | 0 | 0-24 | 0 0 | | | | | |

* In Liverpool, 5s. to 10s. per ton less.
† At the works, 1s. to 1s. 6d. per box less. In Liverpool, 6d. per box less.

REMARKS.—Metals are quiet, and at present prices do not offer sufficient inducement for buyers to purchase more than needed for immediate consumption. The decrease in exports has already much affected our market.

COPPER.—The enquiries have rather improved. Sales, however, have been made in cake about 4*l.* under the fixed price.

IRON.—A very limited business has been transacted in the several descriptions of this metal, and although our quotations are similar to those inserted in last week's Journal, sellers are not indisposed to submit to a slight decline, rather than allow orders to pass by them. Scotch-pigs have deviated but little during the week, the fluctuations not exceeding 1s. to 1s. 6d. per ton. Mixed numbers are now 80s. 6d. cash, f.o.b. in Glasgow.

LEAD.—We have to repeat same prices as last. The market has not undergone any change requiring especial notice.

SPELTER.—The advances that have taken place lately have been very rapid, and we have again to quote a further rise of 20s. per ton. As the pressing demand has now abated, and consumers will not further increase their stocks at the present market price, holders will probably make some slight concession.

TIN.—English is in good request; the advance is well maintained. There is not much Straits offering, and holders are not anxious to sell; some parcels to arrive are at a limit of 113*l.* Banca has been done at 116*l.*

TIN-PLATES.—Makers are firm, and will not sell under our quotations.

STEEL.—Swedish keg has declined. QUICKSILVER same as last.

GLASGOW, OCT. 26.—The prices of Pig-iron have a downward tendency, and holders are more disposed to sell. The present quotations are as follows:—Mixed Nos., 80s. 3d. to 80s. 9d; No. 1, g.m.b., 82s. 6d.; No. 3, 79s. 6d. to 80s. The total exports from the Clyde were, 3695 tons of pig, and from Ardrossan 3093 tons.

LIVERPOOL, OCT. 26.—The demand for manufactured Iron is slack, but prices, on the whole, are well supported; supplies still come forward very slowly. In Pig-iron there is scarcely any business doing: price of warrants, mixed numbers, 81s.; tendency downwards. Tin-plates dull. Lead and Copper unchanged.

PARIS.—Our market is very calm. The rumour which has been circulated of an enormous fall in some descriptions of manufactured iron is but partially confirmed; for although there has certainly been a fall, it has neither been so great nor so general as was reported. Coke iron is still quoted 330 fr., and charcoal 340 fr. In other metals there is comparatively nothing doing, and prices remain the same. In Germany, copper is freely dealt in at former rates; there is, however, much expectation of a rise; sellers are very firm. In Holland, the position of tin is more and more improving. The last quotation for lead is 52 fr. 25c.; and zinc maintains its former price, both at Breslau and Hamburg. On Monday week the Haut-fourneau of Ecaron was put up for sale by tender, and sold for 62,500 fr.; this usine, water-course, buildings, and dependencies, cost the Orleans family 350,000 fr.

BOMBAY, SEPT. 28.—Metals keep firm. Swedish bar-iron has advanced. British has also slightly advanced. Nail, rod, and sheet-iron, have also been sold to a considerable extent. Steel has declined. Copper is firm. In sheeting there has been a slight advance. Braziers as before.

MINES.—The Mining Share Market, without showing any exciting feature, has been characterised by a good amount of business in several descriptions of shares, and in some mines we hear of large transactions taking place. North Bassets have been firm at 18*l.* 15s. to 19*l.* 5s.; Bedfords in demand at 10*l.*; Gonamena, 10*l.* 10s. to 11*l.*, and largely dealt in; Devon Great Consols, 395*l.*; Mary Ann, 36*l.* 10s. to 37*l.* 10s.; North Robert, 29*l.* to 31*l.*; Sortridge Consols, 4*l.* 5s. to 4*l.* 10s.; West Sortridge, 12s. 6d.; Wheal Basset, 560*l.* to 580*l.*; Great Alfred, 22*l.* 10s. to 23*l.* 10s.; Alfred Consols, 17*l.* to 18*l.*; Berriow, 3*l.* to 3*l.* 2s. 6d.; Buller, 680*l.* to 700*l.*

In the Bullion Market,—Mexican dollars, 5s. per oz. Bar silver containing gold, all gold above 5 grains in the pound to be paid for, 5s. 1½d. per oz. standard. Bar silver without gold, 5s. 1½d. per oz. standard.

At the West Caradon Mine meeting, on Wednesday (Mr. N. Tregellas in the chair), the accounts showed—Ores sold (less lord's dues, 371*l.* 7s. 2d.), 5535*l.* 8s. 7d. —By cost for two months, 4468*l.* 19s. 7d.; leaving profit, 1066*l.* 18s.; to which add balance last account, 1103*l.* 16s. 11d.=2173*l.* 8s. 11d. A dividend of 3*l.* per share was declared, after paying which (768*l.*), and 806*l.* 19s. 8d. for new engine and pumps, there would remain in hand 567*l.* 9s. 3d. [The report from Captains R. Dunstan, H. Taylor, and J. Buzza, is among the Mining Correspondence.]

At Wheal Guskus meeting, on the 20th instant, the accounts showed—Balance last account, 2865*l.* 17s. 11d.; five months cost to August, 3148*l.* 1s. 8d.; discount, 14*l.* 13s. 3d.=6028*l.* 12s. 10d.—By calls, 1145*l.* 8s.; black tin sold, 2541*l.* 12s. 9d.; copper ore, 469*l.* 16s. 10d.; arsenic, 23*l.* 6s. 4d.; old water-wheel, 55*l.*: leaving balance against adventurers, 1793*l.* 8s. 11d.; to meet which there were unpaid calls, 1854*l.* 12s.; old materials (say) 200*l.*, leaving balance in favour of mine, 261*l.* 3s. 1d.

At Merllyn Mine meeting, on Tuesday (Mr. W. H. Cuell in the chair), the accounts showed—Balance last account, 7*l.* 12s. 2d.; lead ore sold, 437*l.* 11s.=445*l.* 3s. 2d.—Labour cost, August, 172*l.* 13s. 4d.; Sept., 182*l.* 6s. 10d.; income tax, 20*l.* 8s. 4d.: leaving a balance in hand of 69*l.* 14s. 8d. There was a profit on the two months' working of 41*l.* 16s. 6d., and a balance of assets over liabilities of 159*l.* 6s. 4d. Capt. W. Ramsden reported:—"We are driving the level northward from the Black shaft, in the 26 fm. level; the lode is 18 in. wide, with carbonate of lime and lead ore; we are pushing on with this level night and day, so that we may expedite it, and open ground to Bryn Ferrod Mine. Our water is still very little, our engine being employed only four hours out of the twenty-four. Our pitches are not looking quite so well as when last reported on. I expect I shall be able to sample 15 tons of lead ore on the 9th of next month. I have 41 tons of calamine at Dee Bank Wharf, ready for shipping, and I expect in the course of a fortnight or three weeks to be able to make it up to 50 tons, when I will ship it at Maryport for Carlisle."

At Wheal Tremayne meeting, on the 16th inst., the accounts showed—Labour cost, May, 642*l.* 3s. 1d.; June, 722*l.* 5s. 8d.; merchants' bills, 480*l.* 7s. 2d.=1844*l.* 15s. 11d.—Copper ore sold, 102*l.*; black tin, 1641*l.* 11s. 7d.; arsenic, 137*l.* 10s.; carriage of tin, 11*l.* 19s. 5d.: leaving (less lord's dues paid, 90*l.* 17s. 5d.) balance against the mine, 42*l.* 12s. 4d., to which add that from last account, 26*l.* 1s. 3d., leaves due from adventurers, 68*l.* 13s. 7d. Captains R. and J. Williams and H. Rogers reported that the stopes in the 93 fm. level were worth 7*l.* per fm.; in the 73 east, on Allen's branch, 10*l.*; and in the 53, 12*l.* per fm. In the winze under the 40 the lode was 2 ft. wide, worth 9*l.* per fm. for tin; the stopes in back and bottom of same 3*l.* The tribute department was much the same as last reported, and the quantity of black tin to be raised in the next two months it was hoped, would equal that produced in the previous two months.

At Wheal Charlotte meeting, on the 14th inst., the accounts showed—Balance from last account, 290*l.* 18s. 7d.; copper ores sold, 662*l.* 18s. 2d.; tinstuff, 22*l.* 8s.; materials, 20*l.* 11s. 9d.=(less lords' dues, 37*l.* 15s. 2d.) 959*l.* 1s. 4d.—By labour cost, July, 271*l.* 17s. 2d.; August, 234*l.* 1s.; merchants' bills, 139*l.* 8s. 7d.: leaving balance against the mine, 313*l.* 14s. 7d. The statement of assets and liabilities showed balance in favour of adventurers, 1014*l.* 16s. 9d., after payment of September wages and bills. Capt. B. Gundry reported that the engine-shaft was down 9 fms. 4 ft. below the 20, the price being reduced from 30*l.* to 18*l.* per fm., from the favourable nature of the ground. In the 20 west the lode was worth 1 ton per fathom; in the 20 east, 1 ton. West on the south lode, the lode was 3 ft. wide, worth 3 tons. In the 10 east the lode was intermixed with rich black and grey ore, yielding 1 ton per fm. There were about 30 tons of ore ready for sampling, the produce of three weeks, and 18 tons more ready for dressing. The prospects were considered better than at any period since the commencement of operations.

At Caylan Mine meeting, on Wednesday, the accounts showed—Balance last account, 419*l.* 2s. 11d.; ore sold, 142*l.* 18s.=592*l.* 0s. 11d.—Mine cost and materials, July, 379*l.* 18s. 4d.; August, 252*l.* 13s. 10d.: leaving balance in favour of the mine of 6*l.* 8s. 9d. A call of 1s. per share was made. Capt. J. Barkell, in his report, says—"We have about 70 tons of ore broken on the mine, in addition to 15 tons shipped; we hope to have 30 tons for shipment very soon. We are obliged to keep some of our ore in stock underground on the stulls, until we can properly take it away; by this method we save expense in timber. We are at present getting 18 or 20 tons of lead ore per month; but I feel assured, from the very kindly appearance of the lodes in several places at our shallow levels, that as we get under them by the deeper operations, which we have in progress, the ore ground will be richer, so as to increase considerably our returns of ore."

At East Caradon Mine meeting, on Wednesday, the accounts showed—Mine cost and materials, July, 207*l.* 4s. 11d.; Aug., 194*l.* 11s. 10d.=401*l.* 16s. 9d.—Balance last account, 330*l.* 15s. 1d.: leaving balance against the mine of 71*l.* 1s. 8d. A call of 3s. per share was made. Capt. James Seccombe reported that Williams's shaft was divided, and a footway put in from the surface, and a new horse-whim and shaft tackle erected. The lode was about 6 ft. wide, composed of a large quantity of the finest gossan, mixed with quartz and prian, and containing a small quantity of rich black copper ore.

At the Ritton Castle Mine meeting, on Thursday, the accounts showed—Received for calls, 3240*l.* 15s.—Amount of payments for mine costs, 3101*l.* 6s. 5d.: leaving a balance in favour of the mine of 139*l.* 8s. 7d. Arrears of calls, 7*l.* 10s. A call of 1s. per share was made. A highly satisfactory report of the mine, by Capt. Nich. Ennor, was read, which will be found among the Mining Correspondence.

At Bat Holes Mines general meeting, on Monday, the accounts showed—Mine cost for six months ending September, 1036*l.* 15s.; interest and discount, 4*l.* 8s. 4d. = 1041*l.* 3s. 4d.—Balance from last account, 13*l.* 18s. 11d.; call of 4s. per share made 8th July (1600*l.*—less, unpaid, 756*l.*), 244*l.*; lead ores sold, 353*l.* 13s. 3d. =613*l.* 12s. 4d.: leaving balance, 427*l.* 11s. The payment of calls due, as above, 756*l.*, will leave a balance in favour of the mine of 328*l.* 9s. [Capt. Barratt's report is among the Mining Correspondence.]

At Charlestown United Mine meeting, yesterday (Mr. Margetson in the chair), the accounts showed balance against adventurers, 679*l.* A call of 1s. 6d. per share was made, which it was considered would be sufficient to liquidate all liabilities on the mine.

At Pembroke and East Crinnis Mine meeting, on Thursday, a resolution was proposed for abandoning the adventure, which upon being put to the vote, five were in favour, and 18 against it. A poll was demanded, and the further consideration adjourned. It was intimated that Captain Lyle and Opie would be discharged, and Capt. Prince engaged as an occasional superintendent.

At South Wheal Yeoland meeting, on the 20th inst., a call of 2s. 6d. per share was made, for the further prosecution of the concern.

At Yeoland Consols meeting, on 20th inst. (Mr. E. S. Codd in the chair), the accounts showed balance against the mine of 361*l.* 14s. 8d. A call of 3s. per share was made. Capt. C. Thomas, of Dolcoath, reported favourably on the lode in the shaft and in the bottom levels; and stated that, when the mine was sunk to another level, he expected that it would yield profits.

At Bronfloyd Mine meeting, on Thursday (Mr. Samuel Weatherley in the chair), the balance-sheet, exhibiting 16*l.* 3s. 4d. at the bankers', and a balance of assets over liabilities of 111*l.* 15s. 11d., was adopted, and a call of 1s. per share made. About three-fifths of the mine were represented at the meeting, owing to a notice of motion, by a shareholder, to discontinue the workings; but, in addition to the fact that his movement was entirely unsupported, the improved character of the mine during the past week caused its withdrawal.

At the Trenault adjourned meeting, on Wednesday (Mr. H. Moss in the chair), the minutes of the last meeting were read and confirmed, and, after some discussion, the proceedings were adjourned until Wednesday next, in order, if possible, to raise the necessary funds for the discharge of the existing liabilities, and the development of the property; but, in the event of failure, a resolution will be submitted to immediately wind-up the affairs of the company.

The Knockatrellane Copper Mining Company have convened a general meeting of the shareholders for Wednesday next, for the purpose of winding-up the affairs of the company.

Cubert United, Driggith, Pantymwyn, Penyrhenblas, Westminster, Maesysaln, Belgraves, Fron Fawnog, Brongwyn, Long Rake, Rhiwarth, Michell, and Minera, have sold lead ore.

Bosorn, Great Polgooth, Wheal Enys, and Balloswidden United, have sold black tin.

The Wyndham Consols Mining Company have sold their last sampling, of 7 tons of lead ore, for 14*l.* per ton.

Wheal Whitleigh will sample this day about 20 tons of silver-lead ore.

At North Wheal Robert, the western levels are much improved; they are breaking fine rocks of rich ore from the 30; and there is a good course of ore in the 42. These ends are driving towards, and are about 250 fms. from Sortridge boundary; so that these discoveries are very valuable, and tell well for the whole distance, considering the discoveries at the Sortridge end.

At Holmbush Mine, the new arrangements are progressing most satisfactorily, and in a very short time we shall be enabled to lay before our readers the future plan of operations, which has already been approved by a large majority. Capt. Seccombe reports an improvement this week in the 145 on the Holmbush lode, and on the Flap-jack lode. The tribute department is looking well, and the returns keep up. At the ticketing, on the 19th, 325 tons of copper ore were sold, producing 200*l.*

At Great Wheal Vor, Crease's engine continues to work very satisfactorily. The value of the lode in the 50 is fully maintained.

At the West Crinnis Copper Mines, they have cut the South Crinnis counter lode; its size is about 2 ft. wide, of a promising character, containing some good copper ore. The engine-shaft is down 3 fms. below the 34. They sampled, on Monday last (computed), 34 tons of copper ore.

At Trenow Consols, an improved method of tin sales has been adopted, closely resembling the Cornish and Swansea copper ore ticketings. The names of the tributers, with the number of barrows of tinstuff produced by each, occupy two columns of the ticketing paper, each name being numbered; a column is then ruled for each purchaser, whose name is placed at its head, also with a number, and the amount each bidder is willing to give written in. The highest biddings are then scored under, carried out, and added up, showing the total amount obtained; greatly facilitating the sale, and the means of calculating tribute.

During the week, shares have changed hands in the following:—

DIVIDEND MINES.—Alfred Consols, Altgoed Consols, Bedford, Bryntail, Devon Great Consols, Gonamena, Great Crinnis, Hingston Down, North Wheal Basset, South Caradon, South Tamar, St. Aubyn and Gryils, Tincroft, Trehane, Trewetha, United Mines, Welsh Potosi, West Wheal Darlington, Wheal Basset, Wheal Buller, Wheal Mary Ann, Wheal Trelawny, Wrysgan, Lackamore, and Mining Company of Ireland.

MINES WHICH HAVE SOLD ORES.—Bell and Lanarth, Birch Tor and Vitifer, Cae Gynon, Carbona, Clara, Cubert, Cwm Darren, Darren, Dyfngwm, Eaglebrook, East Tamar, East Wheal Russell, Great Cowarch, Great Wheal Alfred, Great Wheal Buldeen, Great Wheal Vor, Keswick, Lydford, Madron, North Wheal Robert, North Wheal Trelawny, Oraddi, Polgear, Poltimore, Sortridge Consols, South Bog, South Carn Brea, St. Austell Consols, Trannack, Tyn-y-Berth, Wheal Crebor, Wheal Friendship, Wheal Tehidy, Tassan.

MINES WHICH HAVE NOT SOLD ORE.—Bodewl, Cefn Gwyn, East Frongoch, Irish Consols, New Wheal Friendship, North Hingston, Red Dragon, Rheidol, South Devon Consols, Tamar Maria, West Sortridge, West Wheal Friendship, Wheal Ludcott.

In Foreign Mines, the market throughout the week has exhibited a decided improvement. Cobre shares have been dealt in 5*l.* higher than last week, reaching 47*l.* to 49*l.*, and changed hands, yesterday, at the first quotation. Transactions in St. John del Rey were also effected at 28; Mexican and South American, &c. The closing price of Imperial Brazilian was 2⅛ to ¾; National Brazilian, 1⅛ to 1⅛; Copiapo, 12 to 14; Linares, 8⅛ to 9⅛; Lusitanian (of Portugal), ½ to ⅝ prem.; Pontgibaud Silver-lead, 15 to 16; Royal Santiago, 5 to 5½; United Mexican, 3 to 3½. The following prices are merely nominal:—Sue River (of Jamaica), ½ to ¾ per share; Jamaica Copper, ¼ to ½ per share; Clarendon, ½ to ¾ per share; Metcalfe, 1-16ths to 3-16ths per share; Port Royal (of Jamaica), ⅛ to ¼ per share; Cologne Mining, ⅛ to ⅜ per share; New Linares, ¾ to ⅞ per share; Iberian, ¼ dis. to par; Oberhof, ¼ to ½ per share; Peninsular Mining, par to ¼ prem.; San Fernando, ⅜ to ¼ dis.

The Linares Mining Association have advices to the 16th inst., detailing the value of the several lodes and position of the workings, which will be found in the usual place. The water-wheel and crusher were being completed.

The Nouveau Monde Gold Mining Company have received advices from Mr. Phillips, at Ophir, to Sept. 8th. The shaft had been sunk to 30 ft., and the lode become more regular, but showed no gold. Good specimens of gold had been obtained from some shode pits, and the character of the rock was considered promising. A rich pocket of gold stuff had been discovered in the most westerly working, but it had not been assayed; measures were, however, being taken to work it separately. A portion of the vein, 4800 ft. in length, had been arranged for, at a royalty of one-fifth. During August, 27 tons (in the report erroneously printed 17 tons) of quartz had been crushed and amalgamated, producing about 2 ozs. of gold per ton.

The Port Phillip and Colonial Gold Mining Company have advices from their resident director at Melbourne, under date 18th of August, of which the following are extracts:—

MINING REGULATIONS.—Since my last on this subject nothing has transpired of the Governor's intention regarding leasing auriferous lands. The Legislative Council is further prorogued to the 21st September, to meet then for the dispatch of business. In the meantime, I believe it is the Govenor's intention to visit the gold fields, and mature his plans for the general arrangement of the affairs of the colony, including mining. With reference to leasing mineral ground, the general opinion now being quite in favour of it, I have no doubt in a short time some suitable regulations will be issued, enabling companies to carry on mining operations, and I do not think it would by any means advance the interest of this company for me to urge the matter any further at the present moment. I shall not, however, allow more than a very reasonable time to elapse before making another application. I consider the mining interest as important as any other in this country, and have no intention of allowing the company's just claims to be slightingly treated. I have lately instructed Mr. Thompson to examine the Ballarat district. There are in all the gold fields portions of partially worked ground that would answer well to take on lease. I am, however, on the whole, decidedly in favour of the Ovens, on account of the gold, tin, and abundant supply of water. I shall be as glad to report a commencement of operations at the board to hear of it.

GOLD PURCHASES.—I am sorry this is not in a more satisfactory state; there is, however, a probability of improvement. I am not in want of funds.

The Agua Fria Gold Mining Company have received advices from Grass Valley to the 14th September, by the *America*, of the remittance of 307¼ ozs. of gold, the result of the previous 12 days' working at that mine. The quartz crushed during the fortnight was 249 tons, which yielded as follows:—87 tons of Gold-hill vein stone (of which 14 tons were from a poor part of the vein above water-level) yielded at the rate of $21 per ton, $16 being reckoned the value of an ounce of gold. The cost of raising and reducing the vienstone from under water level is $9½ to $11 per ton. 88 tons from Jefferson's Hill yielded at the rate of $14 to $16 per ton. This was obtained at a depth of 20 to 30 feet below water level, at a cost for raising and reducing of from $7½ to $9 per ton. Mr. Attwood anticipated a much better yield at a depth of 40 to 50 feet. 74 tons from Mineral Point yielded at the rate of $14 per ton. The above yield is exclusive of the sulphurets which are still on hand, and will eventually be reduced, but the means of treating which are not yet completed. The insufficient supply of water alone prevented their reducing 70 to 100 tons per day—a quantity which Jefferson's Hill in itself was found capable of yielding. Mr. Attwood adds—"I see no reason to alter the favourable opinion which I at first expressed with respect to the profits to be derived from quartz-mining in California; and though I have met with many difficulties I did not anticipate, and which have delayed me making the returns I had calculated on, yet I hope that it will not be long before I shall be able to prove that I was not mistaken." No advices had been received from the Agua Fria Mine by this mail.

The Wildberg Great Consolidated Mining Company have received advices to the 20th instant. The Weitung stopes produced 4 tons of silver-lead ore per fathom; the Unverhoftesglück lode, 3¼ tons; and the stopes, 8 tons. At the west mines, the Blumengang lode produced 12 tons, and the stopes 11 tons per fm. Carter's engine-shaft was down 29 fms. 1 ft. 6 in. The surface works were progressing very satisfactorily.

The Moselle Mining Company have received a report from Mr. Alfred Jenkin, who has just arrived in London. The mines now working form four distinct setts, each indicating sufficient promise to merit separate attention, and to do them justice each should be manned and worked with energy distinctly. At Maria, in a few months, 40 men may be employed in stoping the high backs; one course has already proved worth 50*l.* per fm. At Emma, there is orey ground to stope away. At Emilia, there are stopes which will pay well at 2s. in 1*l.* The whole operations are highly encouraging, and the surface erections in a state of great forwardness.

The Anglo-Californian Gold Mining Company have issued their general report to the shareholders, in which they state but for an accident to the machinery it would have been in operation in February last; that 1000 tons of ore were raised, and ready for crushing; 91 tons of ore have been crushed, which produced 158 ozs. of gold, the time actually consumed in crushing the above 91 tons, was 56 hours, the gross produce realised by the sale of gold from the 91 tons was 6*l.* 2s. 9d. per ton, the entire cost was 2*l.* 12s. 9d. per ton, showing a profit of 3*l.* 10s. Owing to a deficiency in the supply of water, the crushing was obliged to be stopped. It is anticipated that by the middle of November the springs will rise, when it will be resumed. The machinery is competent to crush 50 tons of quartz per diem, and there appears to be, in Brown's Valley, an unlimited quantity of quartz, similar to that already operated upon. About 5000*l.* more will be required to put the works in a state of completion; this will be expended in obtaining a constant supply of water, a tramway to bring the quartz to the mill, and crushing and amalgamating machinery. In order to obtain the requisite amount, the directors call upon the shareholders to take up the unissued shares, offering them for their advances interest at 10 per cent., and security on the mines, machinery, &c., each leader of 1*l.* to have two shares transferred to him, having the option to take such shares in discharge of the principal, any time within twelve months, or at the expiration of that period to re-transfer the shares to the company upon receiving the principal and interest. The directors conclude with expressing their confidence that although much more time and money has been required than they were led to anticipate by the accounts and calculations furnished them, yet the enterprise will be eventually successful.

The South Australian Copper Mining Company have received advices, which state that the discovery of silver at the Strathalbyn Mines was creating much attention, the average produce from the lead and gossan being over 200 ozs. of pure silver per ton. The supply was apparently inexhaustible at the mine, and the same ores were known to exist in great abundance throughout that district. Four boxes, containing specimens, have been forwarded to London by the *Charlotte Jane*, which is fully expected to arrive next week. The ore will be immediately forwarded to Messrs. Johnson and Matthey to assay, the result of which we shall publish.

The Fort Bowen Gold and Silver Mining Company are making every exertion to get the mines at work. Messrs. Ram and Coulson, with a party of German miners, have proceeded to West Granada. Mr. Ram, in the first instance, has gone to Jamaica to engage labourers and mechanics to take with him to the mine, the directors having determined not to employ in future any Cornish miners. The requisite machinery, which is nearly completed, will be shipped as early as possible, and it is expected to arrive by the time the necessary surface operations, which are inconsiderable, are completed.

At the Ophir Copper Mining Company special meeting, in Sydney, on the 8th May, the report stated that, in accordance with the wish expressed at the half-yearly meeting in Feb., the directors had visited the mine, and spent a sufficient time on the spot to enable them to make a careful and accurate inspection of the locality and of the works. The mine was 20 miles from Bathurst, approached by a good road, and consisted of 640 acres of hilly and well-timbered land. The works were on a hill 200 ft. high, consisting of micaceous and clay-slate, intersected by veins of gossan, impregnated with copper, cropping out to surface, dipping slightly to the east. The metalliferous veins opened on or presenting unmistakable indications are Alger's, Reid's, Irving's, and Barber's lodes; on which five shafts have been sunk, and a considerable amount of ore extracted—perhaps, 150 tons, while the estimate for the ore in sight was 500 tons. An adit had been carried through the hill 80 fathoms, which would cut the whole of the lodes, and this, when finished, would fully develope the real character of the mine, and should the result be successful it will give a most excellent medium for ventilation. From facts brought to notice, there is every reason to expect that the gossan contains gold. The whole of the underground operations, under the superintendence of Mr. Saul Samuel, had been conducted in the most judicious manner. From the great cost of carriage the transit of the ore to Sydney would involve a cost of 50*l.* on every ton of metallic copper, and it was, therefore, considered indespensable that smelting works, at some future time, be erected, which it was estimated might be completed for about 2000*l.* Capt. John Paul, of the Colonial Gold Company, had reported favourably of the mine; the ores would be principally the yellow sulphuret, producing from 10 to 20 per cent. for copper. He bore testimony to the abilities of Capt. Reid, stating that great credit was due to him for the bold and systematic manner in which the operations were carried out. It was resolved that the capital of the company be increased to 20,000*l.*, making it 40,000*l.*, in 4000 shares of 5*l.* each. Of these 2000 were to be allotted to the promoters, and 2000 *pro rata* among the shareholders. The shares to be issued in such numbers, and such calls made as might be deemed advisable, and the directors were authorised to take the necessary steps for the erection of smelting works.

The Liberty Mining Company have convened their next ordinary half-yearly meeting for Thursday next, when the report of the resident director, Mr. T. N. Crosse, will be submitted, and it is hoped there will be a full attendance. Mr. Crosse estimates that with 42 stamps, the nett monthly profit will be 500*l.* The present requirements are 3000*l.*, to pay debts and complete the works. Mr. Crosse says—"In referring to the richness of the ore at the mines, I am anxious to avoid raising expectations that may not be realised, but may state that, about two days before I quitted the mine, which was on the 25th September, a vein was struck in level E, north whim-shaft, which proved to be about 5 feet thick, underlying considerably, and varying in estimated value from 1*l.* to 15*l.* per ton of 2000 lbs. The ore in Riddell's shaft continued of average quality; but I expect to find a rich deposit there, the character of the vein being precisely that of a vein at a neighbouring mine, from which large quantities of gold were obtained in a very short time. The south level from the west cross-cut here is driven on ore, and when it reaches the west cross-cut in centre shaft, we shall have rich ore. The distance is about 50 fms., of which nearly one-third was driven when I left. Bad air and the expense prevented our working in centre shaft to advantage. I have no doubt whatever that the ore generally will pay well for working, and that, as the taking down the backs is proceeded with, most of it will be found rich, especially as we approach the surface. I may remark that the mine bordering ours on the south, after four years' unproductive labour, is now paying well. That adjoining to the north is doing a good business, although their works are incomplete. Neither of those mines has any pretension to be considered on a par with ours."

From California, the news fully confirms the gratifying information which we received by the former mail, of the successful operations of the Agua Fria, and also of the Nouveau Monde Companies. The ground they are working continues to be very rich in gold. We also learn that the Carsona Creek Company are located at last on very excellent ground, rumour there says at an expense of some 60,000*l.* If these things are correctly worked out, there appears to be no reason to doubt the highly profitable results.

In Gold Mining Shares, the market has shown a decided improvement. Nouveau Mondes were in demand yesterday at 7s. 6d. per share. Agua Fria shares were also higher, and changed hands yesterday at ¼ prem.; Anglo-Californian, ¼ to ⅜; Australian, 1 to 1½; Mariquita, ⅜ to ⅝; Waller, ¼. The transactions on the Stock Exchange will be found in the usual place. The non-official are—London and Virginia Gold and Copper, ¾ to ⅛ dis.; Garnett and Moseley, ⅜ to ⅜ per share; Adelaide Land and Gold, ⅜ to ¾ per share; British Australian Gold, 1-16 to ⅛ per share.

In Miscellaneous Shares, the market has generally shown an improvement. Crystal Palace shares have been freely dealt in throughout the week at improved prices, and changed hands yesterday at 3¼. Land shares generally were a shade better. Australian Agricultural closed at 40 to 42; Canada, 110¼ ¾; Netherland's Land, ⅛ to 1½; North British Australasian, ⅝ to ¾; Peel River, 3⅞ to 4⅛; Scottish Australian Investment, 1⅞ to 2¼; South Australian Land, 35 to 37; Van Diemen's Land, 12½ to 13. The closing price of Berlin Water-works was 3 to 3½, ex. int.; Electric Telegraph, 15⅛; Submarine Telegraph, ⅞ to 1; Peninsular and Oriental Steam, 59½ to 60. In Joint-Stock Banks some activity was exhibited yesterday, business being done in Australasia at 79¼, ex. div.; British North American, 63½ to 63⅞; Chartered Bank of India, Australia, and China, ⅞ to 1; London Chartered Bank of Australia, 23; South Australia, 43¾; Union of Australia, 69¼ to 69½; Ditto New, 8; Union of London, 23¼ to ½. In other securities of this description the closing prices were, Chartered Bank of Asia, 4¾ to 5; Commercial of London, 30 to 32; English, Scottish, and Australian Chartered, 3 to 2½ dis.; Oriental Bank Corporation, 41 to 42.

At the Belgian Eastern Junction Railway Company meeting, on Thursday (Major-Gen. Sir Frederick Smith, K.H., R.E., in the chair), a report and statement of accounts were read for the information of the shareholders present, but no resolution was passed for adopting them, as under the statutes a legally constituted meeting cannot be held until the whole line is completed. The accounts showed—To investment, as per former statement, 51,508*l.* 16s. 1d; cash balances and profits on forfeited shares sold, 1051*l.* 13s. 2d.; calls received, 15,250*l.*; proceeds of loan, 135,000*l.* =202,810*l.* 9s. 3d.—Investments, 51,053*l.* 11s. 2d.; payments to contractors, engineering expenses, &c., 146,402*l.* 2s. 11d.: leaving cash balance, 5374*l.* 15s. 2d. The report of the directors stated that in a similar document, issued in July, 1853, they expected the first section of the line would be opened in the January of the following year; but an unusually unfavourable season, and official difficulties connected with the formal approval of the plans of the line, added to other unforeseen causes of delay, unavoidably retarded its completion, and in consequence the inauguration did not take place until the 8th of August. On this occasion a grand fete was given by the town of Nivelles, which was attended by the Minister of Public Works and other functionaries. Any detriment that may have arisen from the delay in opening the first section has been, in a great measure, compensated by the more rapid completion of the second section, which is now ready for opening. The third section is advancing towards completion, and will be finished by Jan. next, and the fourth will be ready for traffic by the ensuing summer. The directors have much reason to be satisfied with the manner in which the works have been executed by the contractors—the Messrs. Waring Brothers—more particularly as regards the construction of the viaduct at Arquenness, a work which they consider to be alike creditable to them and to the company's engineer. A junction is to be effected with the Great Luxembourg at Ottignies, and a joint station erected, by which it is expected that in January next the line will be put in direct communication with Brussels. Nearly all the rolling stock comprised in the contract with the Messrs. Waring has been delivered, and is now in use; but as it will be quite inadequate for the effective working of the line when the traffic is fully developed, orders have, in consequence, been given for three more locomotives and a further supply of wagons, which the call of 10s. is expected to cover. The traffic on the first section of the line—viz., between Manage and Nivelles, has been most satisfactory, notwithstanding the disadvantage incident to its having been hitherto almost limited to passenger traffic. During the two months the line has been opened the receipts have not only been adequate to defray the whole of the cost of working, but have left a surplus towards the general expenses, and being in immediate connection with the best coal fields in Belgium, there seems to be no reason to doubt that the traffic will approach the average of the State lines, and yield to the shareholders an ample remuneration for the capital invested. A lengthened report of Mr. Baly, the company's engineer, was also read; and after several questions were put, which appeared to be satisfactorily answered by the chairman, the proceedings terminated with a vote of thanks to the chairman and directors.

The Frankfort and Hamburg Railway Company have been relieved by the Ducal Government of Nassau from the obligation of constructing the branch line from Stierstaat to Cranberg. In consequence of this alteration, the company will annul 250 shares of 100*l.* each.

At the Geelong and Melbourne Railway Company second half-yearly meeting, held at their offices in Geelong, on the 4th of July (Mr. C. N. Thorne in the chair), the accounts to the 31st of May showed—Calls received, &c. (including grant, 1000*l.*), 54,578*l.* 18s. 11d.; total expenditure to the same date, 41,217*l.* 7s. 4d.: leaving balance in the hands of bankers, 13,361*l.* 11s. 7d. The report of the directors stated that considerable progress had been made in the works since the last half-yearly meeting. Contracts had been entered into for the formation of the line from the company's pier, in Corio Bay, to Cowie's Creek, and are in active course of execution. The first order for rails had been completed on favourable terms by the Ebbw Vale Company. A large proportion of the private lands required for the line had been purchased, and, in the great majority of cases, by private agreement. Three calls amounting, with the deposits, to 6*l.* per share, had been made, and with few exceptions punctually met. In answer to a question by a shareholder, the president stated that about 7500 of the unguaranteed shares were still unallotted. The report and accounts were unanimously adopted. The chairman directed the attention of the meeting to the 40th clause of the company's Act, prohibiting level crossings, and stated that enormous and useless expense would be incurred unless the objectionable clause was altered. A resolution was passed authorising the directors to make the necessary application to the Legislative Council. Mr. T. J Cooke was re-elected a director, and the proceedings terminated with a vote of thanks to the president and directors.

The Antwerp and Rotterdam Railway Company have a direct communication between Antwerp and Rotterdam. The section from Rosendaal to Oudenbosch was opened on Friday last. The company have established an omnibus service from Oudenbosch to Moerdyke, and a steam-boat service from Moerdyke to Rotterdam. The distance between Antwerp and Rotterdam is now performed in less than six hours. On the 1st of December the company expect to open a further portion from Oudenbosch to Zevenberghen.

At the Birkenhead, Lancashire, and Cheshire Junction adjourned half-yearly meeting, at Birkenhead, on Saturday, the object was to ascertain whether it was desirable that the line should be worked in conjunction with the London and North-Western or Great Western railways; and the report of the committee recommended the latter, as most likely to increase their traffic. An amendment was proposed, to omit the words "Great Western," but, after a lengthened discussion, the original motion was carried by a large majority, and the reports of the directors and committee adopted. Messrs. W. Atkinson, T. D. Darbyshire, E. Harper, and W. Evans, were elected directors; and Mr. J. Tyrer re-elected auditor.

In Iron and Coal Companies, during the past week, there has been continued inactivity. The prices are as follow:—British Iron, 7 to 8; Rhymney Iron, 22 to 24; ditto (new), 6 to 8; Portland Iron, 2 to 2½; Mount Carbon, 1s. 3d. to 2s. 6d.; and Duston Iron Ore, par to ½ prem.

The Ardennes (of Belgium) Copper, Lead, and Sulphate of Barytes Mining Company (société en commandite) will hold a special general meeting, at Brussels, on the 15th November, for the purpose of winding-up the concern.

The Duston Iron Ore Company have convened their first general meeting for Wednesday, and the proceedings are looked forward to with much interest. The whole affairs of the company are stated to have been conducted in such an energetic manner that the sale of iron ores are expected to commence next week.

We understand that Mr. Lionel Brough and Mr. Tregoning leave Liverpool to-morrow, for Panama, to examine some mines, belonging to the Darien Company, for the Nouveau Monde Company.

THE MINING SCHOOL.—At the annual meeting of the Royal Geological Society of Cornwall, at Penzance, a principal feature in the report of the council was their allusion to the Mining School of Cornwall. It stated that the establishment of such an exhibition had always been deemed by the society a subject of paramount importance. From the first year of the formation of the Geological Society, the council had constantly endeavoured to carry out such an object, and they rejoiced at the prospect at present offered of a speedy fulfilment of their wishes. Mr. Tweedy, of Truro, regretted that he had very little definite information to give at present; he made some observations on the last report of the committee, which we have before noticed, and alluded to an interesting fact—that three young Turks, who had been receiving scientific instruction in Jermyn-street, had since been working in the mines at Perran, and with pick and gad, had fairly earned miners' wages, and in this way had gained an amount of practical knowledge which would put to the blush many a man brought up from a boy in the Cornish mines. This showed what might be done by practice, after a little scientific instruction. Nothing further could be done until they knew how far Government would assist towards the salaries of the teachers.

CONCESSION OF AUSTRIAN MINES AND RAILWAYS.—The following are the details of the arrangements entered into between the Austrian Government and some French and German capitalists, for the concession of the Austrian state railways and other property:—"The treaty which has just been signed by the Emperor of Austria consists—1. In the concession of the Northern or Bohemian Railway from the frontier of Saxony, by Prague to Brunn and Olmutz.—2. Of the South-Eastern Railway, or Central line of Hungary.—3. Of the railway from Oravicza to Barcasch, or the coal mines of the Banat to the Danube. The concessions are made for 90 years. These lines are worked at the present moment over an extent of 980 kilometres (245 French leagues). In order to effect the junction of Temeswar to the Danube, the company will have to make a line of 83 kilometres. The whole extent of the lines will be 1176 kilometres. The Government also concedes in perpetuity—1. The coal mine of Brandeisch, working within a few kilometres of Prague, and a mine of lignite.—2. A surface of from 30 to 40 square kilometres, to be chosen in the coal district of Fanfkirchen.—3. The industrial and domanial property of the State in the province of the Banat of Temeswar, including coal mines in active working, and connected with the Danube by the railway from Oravicza to Barcasch; an iron foundry, large works for the construction of machinery, a cannon foundry, and 120,000 hectares (300,0.0 acres) of forest and arable land. The price of this purchase is fixed at 200,000,000 frs., payable in three years, without interest. The Government guarantees a minimum interest of 5 per cent. during the whole period of the concession. The company is to be exempt from all taxes on the works, mines, and estates for 30 years, and also from customs duties on all the rails they may import for their use for five years, and a certain amount of working *materiel*."

RAILWAY TRAFFIC.—The traffic returns of railways in the United Kingdom, for the week ending October 21, amounted to 376,916*l.*, and for the corresponding week of last year to 346,757*l.*, showing an increase of 30,159*l.* The gross receipts of the eight railways having their termini in the metropolis amounted, for the week ending as above, to 175,275*l.*, and for the corresponding week of last year to 161,730*l.*, showing an increase of 13,545*l.*

The increase on the Eastern Counties Railway amounted to 2825*l.*; on the Great Northern to 2966*l.*; on the Great Western to 1675*l.*; on the London and North-Western to 2619*l.*; on the London and Blackwall to 134*l.*; on the London, Brighton, and South Coast to 1785*l.*; on the London and South-Western to 1128*l.*; and on the South-Eastern to 413*l.*: total, 13,545*l.*

The receipts on the other lines in the United Kingdom amounted to 201,641*l.*, and for the corresponding period of 1853 to 185,027*l.*, showing an increase of 16,614*l.* in the receipts of those lines, which, added to the increase on the metropolitan lines, makes the total increase 30,159*l.*, as compared with the corresponding week of 1853.

GREAT CENTRAL RAILWAY.—Application has been made to the Mayor of Carlisle, and to the chief magistrates of Annan, for correct information on the capabilities of the Solway ports, that one of the best of them may be chosen as the shipping depot of the Great Central Railway, from North Tyne, Tiviotdale, and Liddell, to Staffordshire and Wales, or *vice versa*, and determine the route from Liddesdale to that port.

RAILWAYS IN THE WEST OF IRELAND.—A meeting of influential landed proprietors was held on the 20th inst. at the Court House, Tuam (Lord Dunsandle in the chair), for the purpose of taking into consideration the best measures to insure railway communication with Mayo from Athewry by Tuam. Several resolutions in favour of the undertaking were unanimously passed.

## PRICES OF MATERIALS CHARGED AT WHEAL UNY.

| Description. | June. s. d. | July. s. d. | Aug. s. d. |
|---|---|---|---|
| Coals ... per ton. | 17 0 | 17 0 | 17 0 |
| Timber, balk ... per foot. | 1 0 | 0 11 | 0 10 |
| " pine ... " | 1 10 | — | 1 8 |
| Iron, common ... per cwt. | 11 0 | 11 0 | 11 0 |
| " faggotted ... " | — | — | 15 0 |
| " hoop ... " | 14 6 | 15 0 | 15 6 |
| Steel, H 2 ... " | — | — | 24 0 |
| White Lead ... " | — | 30 0 | — |
| Tallow ... " | 70 0 | — | 70 0 |
| Olive Oil ... per gall. | 12 0 | — | — |
| Candles ... per doz. | — | 7 6 | 7 6 |
| Leather ... per lb. | — | 1 6 | — |
| Hemp ... " | — | — | 0 8 |
| Yarn ... " | — | — | 0 8½ |
| Lime ... per ton. | 17 6 | 17 6 | — |



NOUVEAU MONDE GOLD MINING COMPANY.—In the despatches, as printed under the heading "Foreign Mines," in another column of this day's Journal, the monthly returns of quartz from Capt. Williams's vein is stated at 17 instead of 37 tons.



## LEAD ORES.

| Mines. | Tons. | Price per ton. | Purchasers. |
|---|---|---|---|
| Sold on the 13th October. | | | |
| Cubert United | 30 | £15 3 6 | T. Somers. |
| Sold on the 24th October. | | | |
| Driggith | 10 | £12 7 6 | Roughtengill Co. |
| Ticketing at the King's Head Hotel, Holywell, October 26. | | | |
| Pantymwyn | 15 | £13 1 0 | Walker, Parker, & Co. |
| Penyrhenblas | 11 | 13 1 0 | Newton, Keates, & Co. |
| Westminster | 70 | 13 14 0 | Walker, Parker, & Co. |
| Maesysaafn | 70 | 13 15 6 | ditto |
| ditto | 70 | 13 13 0 | ditto |
| ditto | 3 | 4 0 0 | ditto |
| Belgraves | 15 | 13 8 6 | Newton, Keates, & Co. |
| Fron Fawnog | 7 | 8 8 0 | ditto |
| Brongwyn | 12 | 13 14 0 | Walker, Parker, & Co. |
| Long Rake | 10 | 13 8 6 | Newton, Keates, & Co. |
| Rhiwarth | 20 | 14 5 6 | ditto |
| Michell | 5 | 12 7 6 | Walker, Parker, & Co. |
| Minera | 115 | 13 15 6 | ditto |

## BLACK TIN.

| Mines. | Tons | c. | q. | lb. | Price per ton. | Amount. | Purchasers. |
|---|---|---|---|---|---|---|---|
| Sold on the 14th October. | | | | | | | |
| Bosorn | 0 | 5 | 1 | 12 | £70 0 0 | £ 18 15 0 | Bolitho. |
| Sold on the 19th October. | | | | | | | |
| Great Polgooth | 10 | 2 | 1 | 13 | £66 0 0 | £667 16 1 | Daubuz. |
| Sold on the 20th October. | | | | | | | |
| Wheal Enys | 3 | 13 | 2 | 0 | £69 0 0 | £253 11 6 | Calenick. |
| ditto | 1 | 5 | 1 | 0 | 43 5 0 | 54 12 0 | ditto |
| Sold on the 21st October. | | | | | | | |
| Balleswidden United | 1 | 9 | 2 | 7 | £70 15 0 | £104 11 6 | Bolitho. |
| ditto | 0 | 2 | 3 | 1 | 65 15 0 | 9 1 0 | ditto |

## COPPER ORES.

The Ores sold at the SWANSEA TICKETING, on the 17th inst. (the particulars of which appeared in our last Journal), were purchased by the following companies:—

| | Tons. | Amount. |
|---|---|---|
| Copper Miners' Company | 123 | £2088 19 0 |
| Freeman and Co. | 32 | 499 4 0 |
| Grenfell and Sons | 285½ | 6072 5 9 |
| Sims, Willyams, Nevill, and Co. | 169½ | 2154 16 3 |
| Vivian and Sons | 356 | 5816 2 0 |
| Williams, Foster, and Co. | 491 | 7005 17 0 |
| Mines Royal Company | 68 | 1563 6 0 |
| English and Australian Copper Company | 62 | 950 14 0 |
| Mason and Elkington | 125 | 2967 10 0 |
| F. Bankart | 193 | 4127 0 6 |
| Total | 1905 | £33,245 14 6 |

There will be no sale at Swansea on the 31st inst.

## COPPER ORES.

Sampled October 11, and sold at Tabb's Hotel, Redruth, October 26.

| Mines. | Tons. | Price. | Mines. | Tons. | Price. |
|---|---|---|---|---|---|
| United | 100 | £4 12 6 | South Caradon | 23 | £20 17 6 |
| ditto | 93 | 5 13 0 | ditto | 18 | 5 5 6 |
| ditto | 90 | 6 8 6 | Wheal Comfort | 67 | 2 5 6 |
| ditto | 86 | 1 4 0 | ditto | 63 | 1 17 0 |
| ditto | 80 | 6 6 6 | ditto | 41 | 2 0 0 |
| ditto | 75 | 7 17 0 | ditto | 39 | 0 4 6 |
| ditto | 56 | 5 6 6 | ditto | 4 | 19 7 0 |
| ditto | 54 | 4 9 6 | South Crinnis | 104 | 7 14 6 |
| ditto | 48 | 6 18 6 | ditto | 46 | 10 11 0 |
| ditto | 43 | 4 3 6 | ditto | 30 | 14 17 6 |
| ditto | 40 | 7 1 0 | Creegbrawse | 60 | 5 15 0 |
| ditto | 38 | 4 3 0 | ditto | 46 | 4 11 0 |
| ditto | 22 | 1 18 6 | ditto | 43 | 5 15 0 |
| Tresavean | 92 | 3 1 6 | ditto | 18 | 4 19 0 |
| ditto | 87 | 3 4 0 | Pemb. & E. Crinnis | 92 | 5 13 0 |
| ditto | 77 | 4 4 6 | ditto | 41 | 8 6 6 |
| ditto | 72 | 3 18 6 | ditto | 20 | 2 7 0 |
| ditto | 69 | 5 14 6 | Perr. Gt. Wh. Leisure and Bollena United | 45 | 2 10 6 |
| ditto | 68 | 3 13 0 | ditto | 38 | 2 16 6 |
| ditto | 61 | 4 11 0 | ditto | 33 | 4 1 6 |
| ditto | 50 | 3 4 0 | South Tolgus | 46 | 12 13 0 |
| ditto | 58 | 2 16 0 | ditto | 37 | 6 0 6 |
| ditto | 46 | 7 1 0 | ditto | 24 | 5 1 0 |
| ditto | 23 | 1 5 0 | ditto | 7 | 5 11 0 |
| West Wh. Damsel | 90 | 5 18 0 | North Downs | 57 | 7 3 6 |
| ditto | 72 | 5 17 6 | ditto | 16 | 13 1 0 |
| ditto | 60 | 6 0 0 | Wheal Busy | 55 | 4 4 6 |
| ditto | 54 | 6 4 0 | ditto | 10 | 3 8 0 |
| ditto | 37 | 2 1 6 | Paynter's Ore | 15 | 1 12 0 |
| Fowey Consols | 130 | 8 12 6 | ditto | 4 | 0 11 6 |
| ditto | 86 | 9 15 6 | North Wheal Damsel | 16 | 5 1 0 |
| ditto | 77 | 8 18 0 | Treleigh Consols | 15 | 5 8 6 |
| South Caradon | 96 | 16 5 6 | Porth Wheal Mary | 11 | 2 7 0 |
| ditto | 74 | 10 6 0 | St. Austell Consols | 6 | 9 14 0 |
| ditto | 35 | 8 15 6 | | | |

TOTAL PRODUCE.

| | | | | | |
|---|---|---|---|---|---|
| United Mines | 825 | £4297 19 6 | Perran Gt. Wh. Leisure, &c. | 116 | £355 9 0 |
| Tresavean | 712 | 2794 5 0 | South Tolgus | 114 | 964 17 6 |
| West Wh. Damsel | 313 | 1725 11 6 | North Downs | 73 | 617 15 6 |
| Fowey Consols | 293 | 2647 4 0 | Wheal Busy | 65 | 266 7 6 |
| South Caradon | 246 | 3206 16 0 | Paynter's Ore | 19 | 26 6 0 |
| Wh. Comfort | 214 | 437 3 0 | North Wh. Damsel | 16 | 80 16 0 |
| South Crinnis | 180 | 1734 19 0 | Treleigh Consols | 15 | 81 7 6 |
| Creegbrawse | 176 | 942 5 0 | Porth Wheal Mary | 11 | 25 17 0 |
| Pemb. & E. Crinnis | 153 | 908 2 6 | St. Austell Consols | 6 | 58 4 0 |

Average Standard ..... £147 2 0 | Average Produce ..... 5⅞
Average Price per ton ..... £5 18 6
Quantity of Fine Copper, 3547 tons | Quantity of Fine Copper, 210 tons 4 cwts.
Amount of Money ..... £21,171 8 6
LAST SALE.—Average Standard ..... £142 0 0.—Average Produce ..... 6¼
Standard of corresponding sale last month, 143*l.* 10s.—Produce 6½.

### COMPANIES BY WHOM THE ORES WERE PURCHASED.

| | Tons. | Amount. |
|---|---|---|
| Mines Royal Company | 156 | £1018 3 3 |
| Vivian and Sons | 561 | 3314 14 6 |
| Freeman and Co. | 284 | 1595 12 3 |
| Grenfell and Sons | 579 | 2384 2 9 |
| Sims, Willyams, Nevill, and Co. | 344 | 2161 3 0 |
| Williams, Foster, and Co. | 654 | 5078 6 0 |
| English and Australian Company | 210 | 1296 12 3 |
| Mason and Elkington | 290 | 1664 2 6 |
| F. Bankart | 238 | 1373 3 0 |
| Copper Miners' Company | 201 | 1285 9 0 |
| Total | 3547 | £21,171 8 6 |

Copper Ores for sale on Thursday next, at Tabb's Hotel, Redruth.—Mines and parcels.—Wheal Basset, 511—Wheal Seton, 367—North Roskear, 364—Tincroft, 352—South Wheal Frances, 230—North Wheal Crofty, 220—North Pool, 141—Pendarves and St. Aubyn, 24—West Stray Park, 30.—Total, 2229 tons.

Copper ores for sale on Thursday week, at Tabb's Hotel, Redruth.—Mines and parcels.—Wheal Butler 985—West Wheal Basset 304—Carn Brea 381—Par Consols 320—Alfred Consols 303—Halamanning and Croft Gothal 222—North Wheal Basset 215—West Alfred Consols 172—Boiling Well 139—South Crenver 137—Great Wh. Alfred 132—Rosewarne United Mines 116—Levant 114—Clijah and Wentworth 113—Botallack 100—Paull's Downs 67—Cook's Kitchen 60—Treloweth 52—West Fowey Consols 45—Wheal Helen 38—West Crinnis 34—Camborne Consols 30—St. Aubyn and Grylls 29—St. Ive's Consols 28—Wheal Trefusis 16—Victoria 15—Great Wheal Fortune 5—Relistian 3.—Total, 4375 tons.

HULL, OCTOBER 26.—Our correspondents (Messrs. T. W. Flint and Co.) state that mining shares are still without movement. There is little inclination to sell, and certainly none to buy. There is not much disposition, either, to do business in railway shares, until circumstances with respect to the corn market, the money market, and the war, develope themselves sufficiently to form grounds for an opinion as to future prices.

## Notices to Correspondents.

*** Much inconvenience having arisen in consequence of several of the Numbers during the past year being out of print, we recommend that the Journal should be regularly *filed* on receipt: it then forms an accumulating useful work of reference.

We regret that several letters of a too personal nature should have lately obtained admission in our Journal—one in our last Number in particular. We are at all times tolerably diligent in expunging reflections on individuals, and endeavour generally to confine the strictures of our correspondents to the management of companies rather than the conduct of individuals. We must, however, especially impress on those who may feel disposed to forward such letters to us, that personalities be in future altogether avoided, or their communications will not meet with the attention that would otherwise be accorded them. With regard to the letter of "An Old Citizen, of the Old School," as reflecting on the Port Phillip Company, all that we may be called upon to state respecting that or the company is, that the position in society of the directors must place them beyond suspicion of conduct derogatory to that of gentlemen; and we are assured that shareholders, by calling at the office, can inspect all the documents which have been forwarded to them, and obtain every particular of information in their possession: for the non-productiveness of the operations in Australia they clearly are not responsible, while the proprietors, by assembling at the forthcoming meeting, can satisfy themselves of the past rectitude of management, and decide upon what course should be pursued in the future conduct of operations, if change be decided upon. With these remarks, we must leave the matters in dispute for settlement between the directors and shareholders, the parties concerned.

GOLD AMALGAMATION.—SIR: Had it been necessary, I could have explained the reason why the Tyrol process was found so much inferior to that adopted in Marmato. I beg leave to acquaint Mr. M'Arthur that the routine and established principles of our gold and silver mines are much more perfect than that explained in the work alluded to. Such compilations are only intended to give a general idea to beginners, and are not by any means equal to our every-day practical experience.—EVAN HOPKINS: *Oct.* 24.

DR. COLLYER.—SIR: This gentleman deserves a great deal of credit for the manner in which he has carried on his experiments. I have every confidence in the details of his last experiments, and they place the questions at issue in their true light.—EVAN HOPKINS: *Oct.* 24.

ANGLO-CALIFORNIAN GOLD MINING COMPANY.—The sum of 3271*l.* for law charges may appear to be extravagant, but when it is considered that, owing to the bad management of those first connected with the company, several actions had to be tried, and unprincipled parties prevented from issuing an unlimited quantity of scrip, it will be seen that they were necessary expenses, which could not be avoided, when the safety of the association was considered. The principal subscribers in the first instance were obtained from the provinces; naturally, they required to be represented by those with whom they were acquainted, and could repose confidence in. A large amount of the sum charged for directors was caused for travelling expenses: as several of these country directors are now residing in town, probably some reductions might be made.

"S. L. B." (Broad-street).—The company have some time since applied to the Master in Chancery. There is not any probability that the shareholders will recover much of the amount they subscribed upon the faith of this apparently glowing adventure.

"An Old Subscriber" should address his information to Mr. H. Guedalla, 17, King's Arms-yard.

SAN FERNANDO MINING COMPANY.—SIR: You have inserted many articles remarking on the value of this mine, and on the fact of its paying 12 per cent. in dividends. As a constant reader of your Journal, I was induced to purchase 300 shares at par, supposing, as a matter of course, that the statements were founded on facts. In July last you published reports from the mine, saying that veins had been cut of extraordinary value; one would yield 40 tons, one 30 tons, and two 20 tons of rich lead ore per fm. I should like to be informed how it is, with all this additional mineral wealth, that we hear nothing of the quarterly dividend, now over-due. Many, I know, were afraid to buy at that time, because they thought the report too good to be true; others, because they thought it was done to rig the market, and thus to get out the unallotted shares. The withholding a dividend after the usual time has a tendency to strengthen such a supposition. If the mine legitimately paid 12 per cent. last year, and the reports issued last July were facts, it ought this year to pay 30 per cent. at least. Can you inform me in your next Journal whether they intend to pay a dividend this quarter? [I enclose you my card.]—A SHAREHOLDER: *London, Oct* 20.

"J. F. D." (Penzance).—We quite agree with our correspondent, that enough has been written on the subject of his letter. "J. F. D." should adopt his own suggestion—attend the forthcoming meeting, and obtain the information he requires.

ALFRED CONSOLS.—We have been unable to procure a copy of the report, or we should have published it.

"R. S. T." (Stockwell).—It was anticipated when the two companies were amalgamated, under the name of the Monarch Gold Mining Company, that the association would be successful in their operations in the colony. It was considered a legitimate undertaking; a staff was dispatched, and the directors applied themselves energetically towards commencing business. Several of the other companies, it must be remembered, have taken the money of the shareholders and made no effort. Information could probably be obtained from the purser as to the present position of the company.

PENMAEN GOLD MINING COMPANY.—"A Shareholder" is informed that Messrs. Medwin and Hall's portable engine was returned to those gentlemen on Monday. The contract was signed in June last—the directors stipulating to pay 1*l.* per day for the hire. Our correspondent can obtain the information as to the reason of its being returned by applying to the secretary, at the offices of the company, Great Winchester-street.

"S. G." (Regent's-park).—The shares in this association were offered a few months ago at a very low rate. The company has always been in bad odour. It is questionable whether any funds will ever be returned; the money obtained from the public has most likely been absorbed in office expenses and directors' charges.

VAN DIEMEN'S LAND.—In Mr. M'Arthur's letter in last Journal, for "firs" read "ferns;" for "Bendant" read "Beudant."

DODGES OF GOLD MINING DIRECTORS.—SIR: Ever since the commencement of hostilities by myself against the gold mining directors, I have been beset by people who afterwards turn out to be spies. They correspond perseveringly, and abuse directors in almost Billingsgate slang, personating this character in order to gain confidences and extract information as to my projected plans, which they instantly send to head quarters. The "detective," who has given me a hint about certain "dummies," is thanked. My ubiquitous power of routing out secrets is obtained at a vast expense to myself, as every man has his price, and never peaches for nothing. I am now "wide awake;" and certain recent proceedings have only made me more enraged than ever. Some most racy and amusing narratives will soon see the light, much to the enlightenment of greenhorns.—H. GUEDALLA: *Oct.* 26.

"Inquirer."—The quickest passage from Australia was by the *Lightning*, having made the run from Melbourne to Liverpool in 63 days, arriving in that port on Monday last. The *Red Jacket* performed the distance in 73½ days, and the *Crest of the Wave* in 74 days—both being considered extraordinary passages, until they were eclipsed by the *Lightning*.

ST. JOHN DEL REY.—"A Warning Voice," we fancy, must seek other means of arousing the shareholders than by addressing them anonymously through our Journal.

JAMES E. PROCKTER'S BANKRUPTCY.—SIR: In your last Journal you report the examination of this bankrupt, in which he stated that I advised him to do certain acts therein detailed. The reprehensible conduct then admitted by James E. Prockter may render any reply from me unnecessary, yet I beg you will allow me, through your columns, solemnly to declare that his statements respecting myself are without the slightest foundation, and at the bankrupt's next appearance before the Commissioner I shall attend, to prove on oath that they are utterly untrue, and gross fabrications.—JOHN D. YOUNG: *Barnstaple, Oct.* 25.

"T. C. B." (Baker-street).—Some disclosures will be shortly made of the disgraceful conduct which has characterised this association. Not even the officials have been paid, and, without doubt, among the bad it stands pre-eminent.

AUSTRALIAN GOLD COMPANIES.—SIR: The valuable information relative to the future prospects of gold companies which Mr. Michel has given us, has not, it appears to me, been duly appreciated. Several parties have come forward to oppose him, and have endeavoured to throw cold water upon his well-projected schemes, but all without effect. Mr. Michel has come before us, and laid his plans down in a straightforward manner. He does not demand an extravagant salary—he does not look at his own pecuniary benefit—no: his suggestions have all proceeded from a spirit of philanthropy, to aid the now suffering shareholders in retrieving their great loss and misfortune. The public have in him the advantage of sound practical experience. If the unfortunate shareholders be foolish enough to allow this excellent opportunity to pass, they will indeed be "penny wise, and pound foolish," as the old proverb says. The plans and suggestions set forth by Mr. Michel have been clearly demonstrated. I strongly encourage him, and hope he may be successful in carrying out his views. I am only surprised that some company has not already secured Mr. Michel's valuable services, but hope he may shortly succeed.—MAXIMUS: *York, Oct.* 21.

"C. W." (Hoxton).—Cadmium was discovered by Stromeyer, in 1817, in an oxide of zinc; it may be obtained from the sublimate which rises from calamine. Cadmium is both ductile and malleable, resembles tin in appearance and fusibility, is nearly as volatile as mercury, and its vapour, which is free from odour, condenses into shining drops. Its specific gravity is about 8·6. When heated in the open air it is readily oxidized. Its only oxide is of an orange yellow, and consists of 55·8 cadmium, and 8 oxygen.

We have particularly to request that subscribers and others, in paying accounts, will send cheques or post-office orders, in preference to postage-stamps.

*** It is particularly requested that all communications may be addressed—

TO THE EDITOR,
*Mining Journal Office,*
26, FLEET-STREET, LONDON.

Post-office orders made payable to Wm. Salmon Mansell, as acting for the proprietors.

# THE MINING JOURNAL
## Railway and Commercial Gazette.

LONDON, OCTOBER 28, 1854.

In another column will be found an account of some of the "subjects for premiums" which the SOCIETY OF ARTS has invited members and others to communicate detailed accounts of. In their programme they state that it is possible that many of the things here set down have already been accomplished, and though this may be the fact, the knowledge of them has hitherto been limited, through the information not having been made public. The subjects on which information is desired are in number 140, and are comprised under the classes of—Raw Materials, which constitute the greater portion, Machinery, Textile Fabrics, Metallic, Vitreous, Ceramic, and miscellaneous Manufactures.

Although many of the subjects, as will be seen, are known to practical and scientific men, each in their several branches, yet it will be perceived that the general knowledge of them, as far as regards the public, is limited; and although, from various causes, the most sanguine cannot anticipate that in all cases the necessary information will be elicited, yet it may be confidently hoped that much will be accomplished, and lucid explanations afforded of many useful and interesting pursuits and manufactures, which are now comparatively but little known; at the same time, those contributing, though they may and should strive to attain the premium on the subject on which they write, ought to bear in mind that, although they are unsuccessful, yet they have it in their power to contribute much valuable knowledge, which may possibly be wanting in the more successful candidate, and a subsequent digest of the opinions of all will render an incalculable benefit to the world in general. What course will be pursued in awarding the premiums we are not aware of; the Society of Arts, on several occasions, has been suspected of favoritism, and although never accused of corrupt mercenary motives, yet it is supposed to have been swayed by interest rather than merit. As many of the subjects now put forward for competition are almost purely practical, we will venture to hope that the council will not be fettered by the rules of high art, but in giving their judgment, should they find such necessary, call in the aid of those who are competent to assist them, even though they should not be members: they invite the public to compete, and it is but just they should have some parties to represent their interests. We should not have felt ourselves justified in making these observations, had we not the knowledge that much useful information could have been communicated to the Society of Arts, if there did not exist a feeling abroad such as we have alluded to.

Our limits will not allow us fully to notice the several subjects enumerated, and we must, therefore, confine ourselves to those which come more especially under our province; even to these we cannot afford the attention they merit, consequently our remarks must be brief, solely touching upon that in which we are more intimately concerned. The first subject is "For an account of the methods adopted in working metalliferous mines." Although at various times accounts of particular workings have been published, yet it has been felt that a concise description of the various methods of working mines in the several parts of the globe has long been wanted, and if a comparison of the several modes pursued were dilated upon, together with the cost of the explorations, as well as the dressing, until the ores were made merchantable, it would be a most valuable addition to our hitherto defective mining knowledge. It is not to be supposed that one person will be able to contribute this from his personal experience, and to a certain extent it must be a compilation. Great care must be taken, however, that only trustworthy authorities are consulted, or, however valuable it may be in other respects, the treatise may be liable to mislead. The second, for an essay on "Ancient Metallurgy," can only be sought for among old records here, and the histories of other countries. The Hartz and Freyberg are rich in sources which may be rendered available to those competing for the premium. In the third, the "Account of the various commercial copper ores, as well as the smelting process in various countries, and the methods by which the precious metals can be separated from the copper," is easily attainable; though we could have wished that, in addition to this, some means could have been suggested, so as to render of utility many of the products which are now rejected as of no value. The importance of the various manufactures of iron, as well as the contrast between the several processes here and those of America and the continent of Europe, will be a valuable addition to our metallurgical lore. The increased consumption of tin renders of value any fresh discoveries of that mineral; nor must be underrated the treatises on wolfram, tungsten, nor the suggestions for obtaining titanium from the ores of menaccanite or iserine.

The production of the various ores of zinc in this country has hitherto not been rendered of that commercial utility which possibly would have been arrived at had our manufacturers adopted a more improved mode of smelting, and any further light on this topic cannot fail to be regarded with interest. The noxious effects from the fumes in the condensing of lead slags have long been a matter of complaint in those districts where the works are situated, and any plans for the more effective condensation of them will be a boon to those inhabiting the country adjacent. For a considerable period we have advocated the propriety of saving the sulphur contained in the ores of lead and copper; we have pointed out the method practised in Germany and Sweden, and we are of opinion that they might profitably be made use of here. The Council of the Society of Arts have seen the importance of the question, in fixing the eleventh subject for a premium to be "for the best account of the production of sulphur and arsenic from the metalliferous ores of the United Kingdom, and statistics of the use and export of these substances," and thus this difficult question will, we trust, obtain some satisfactory and practical solutions from the several competitors.

It has been stated that the purest plumbago has only been found in Cumberland: several qualities have been found in other localities; and some years since a party of English merchants shipped a large quantity from the Lofodden Islands, in Norway; this was, however, so coarse, that it was of no commercial value. A better sort was discovered (by Commerce-raad J. H. Lundt, a Danish gentleman) in Greenland, and pencils of a good quality were manufactured from the specimens he obtained; we are, however, unable to state whether his discoveries in that remote region led to any practical result. As plumbago exists in coal formations and primitive rocks, we may assume that researches will be arrived at in the British possessions, and, although it may not be of equal purity to that worked at Borrowdale, in Cumberland, yet, we may surmise that there exists graphite, which may be so worked as to be rendered available as a substitute. The accounts of the methods of desilvering lead, as well the manufactures of steel in different districts and countries, together with a series of specimens obtained from coal otherwise than gas and coke, as well as the discovery of a bed or beds of white sand in England suited to the manufacture of glass, and possessing similar properties to the French sands, as well as the different products to be obtained from shale, are all of great and recognised importance; likewise, that for the production of castings, rivalling in sharpness and delicacy those now imported from Berlin. There are several other topics we could have dilated upon which more or less have an affinity to the objects for which this Journal is devoted, but as they are somewhat foreign to our especial purpose, we have not alluded to them in this article. As we have previously observed, it cannot be expected that each subject will be treated of, but if only one quarter receives notice, the Society of Arts will have done good service.

All communications are to be delivered to the society's house, free of expense, before the 31st of March, 1855; successful candidates will be communicated with on or before the 13th June, and unrewarded articles must be applied for between that date and the 4th of July, 1855. The communications read at an ordinary meeting will be considered the property of the society, unless a previous arrangement has been made to the contrary; should these not have been published twelve months after the date of reading, the author may obtain a copy of the same, and publish it in any manner he may think fit.

In dismissing the subject, while we recognise the utility of the Society of Arts, and the benefits likely to accrue to all parties through the diffusion of knowledge by its means, we must reiterate a hope that, while the claims of high art are duly appreciated, the more useful sciences which enter into the daily appliances of human labour will not be neglected, and that the premiums, without distinction of interest or class, will be awarded to those who best have earned them. *Palmam qui meruit ferat.*

In our last Journal, while reviewing the proceedings of the BRITISH ASSOCIATION, at Liverpool, we alluded to the very interesting experiments of Mr. FAIRBAIRN, on the effect of extremely great pressure on bodies subjected to it. We are enabled to lay the results more at length before our readers; and as that very eminent engineer has stated that he considered it highly probable, that the day was not very far distant when the resisting powers of metals, as well as their densities, might be increased to such an extent as to insure not only greater security, but economy, by solidification under pressure, the subject assumes such importance as to require from us a special notice. Mr. FAIRBAIRN operated under the enormous pressure of 90,000 lbs. on the square inch, and the objects kept in view in his researches were to ascertain the exact laws which govern the cohesive strength of bodies, and how far a knowledge of these laws may conduce to the reduction of metals and their subsequent solidification, so as to obtain increased strength and density. Bars of a yielding substance, spermaceti, were first the subject of experiment; when cast they were left to solidify at the same temperature, but under different pressures. It was found that when pressure was applied to those bars, that one which had sustained a pressure of 40,793 lbs. carried 7·52 per square inch more weight than the one submitted to a pressure of 6421 lbs., the ratio being in favour of the more strongly compressed bar in its power of resistance to a tensile strain as 1 to 876. The experiments established, that bodies when solidified under pressure have not only their densities greatly increased, but their molecular structure is also materially affected, so as to increase their adhesive power.

These results were still further illustrated by cubes of an exact inch, carefully prepared, being loaded with weights until they were completely crushed: the first cube solidified, under a pressure of 6421 lbs., was crushed with 213 lbs. weight. Tin was then subjected to experiment, and a quantity of pure tin was melted, and allowed to solidify, first at a pressure of the atmosphere, and afterwards at a pressure of 908 lbs. on the square inch. The same quantity, taken from the same ingot, was then submitted to a pressure of 5698 lbs. on the square inch. The breaking weights of the first were 4053 lbs., of the second 5737 lbs., being an increase of nearly one-third on the crystalised metal, when solidified under about six times the pressure. It was also found that the specific gravities of bodies were very naturally increased in a given ratio to the pressure; accordingly, spermaceti solidified under a pressure of 908 lbs. on the square inch, had a specific gravity of 0·94859, while that solidified under a pressure of 5698 lbs. had its specific gravity increased to 0·95495. The specific gravity of tin also, in like manner, underwent some increase by the increase of pressure. Mr. FAIRBAIRN stated that he had further experiments, some in progress, and others in contemplation, to determine the law which governs this increase in specific gravity, and also to ascertain the conducting powers of bodies solidified under severe pressure.

Experiments had been also made by subjecting such substances as clay, charcoal, and various kinds of timber, to extremely heavy pressure. A bar of powdered dry clay, 3¼ in. long and 1¼ in. diameter, after having been hammered into the cylinder so as to become slightly consolidated, was reduced in bulk, with a pressure of 9940 lbs. on the square inch, to 2·958; with a pressure of 54,580 lbs. to 2·3; with a pressure of 76,084 lbs. to 2·285; and with a pressure of 97,588 lbs. to 2·159 inches. With respect to the great scientific interest attached to such experiments, it is not too speculative to anticipate important practical results on the possibility of increasing the tensile powers of materials required in civil and naval architecture, and of iron, wrought as well as cast, on both of which such heavy duties are cast in the numerous applications of our vast and complicated machinery.

A question of some nicety respecting a bequest of shares in a public company came before Vice-Chancellor PAGE WOOD, in the case of CLIVE *v.* CLIVE, and was decided by him during the last sittings of the Court of Chancery. The Peninsular and Oriental Steam Company was incorporated in the year 1840, with a capital of one million sterling, in 50*l.* shares, which capital was subsequently increased to one million and a half, by shares of similar amount. Mr. JOHN CLIVE was a proprietor by purchase of 170 of the old or original shares, and in right of them was afterwards an allottee of 85 new shares. The Deed of Settlement of the company, regulating the shares, provided that the nett profits should be rateably divided every half-year, to become payable within 21 days after they should be declared. The 28th section declared that the owners of shares should be entitled to a dividend of the profits, rateably, according to the amount of instalments on the shares which shall have been paid up. A subsequent section then provided that every present or future proprietor or holder shall pay, without fail, every instalment on or before the day appointed for payment, and should pay interest for same in case of default. It was further declared, that *the personal representatives of deceased proprietors should alone be considered* as the holders of their shares; and payments of dividends were suspended until some person should become the proprietor, and be thereby entitled to receive them.

By the deed of purchase, under which the old shares were assigned to Mr. CLIVE, he expressly accepted them, subject to the provisions of the Deed of Settlement, and he covenanted to abide by and obey all the rules, regulations, and bye-laws of the company. All the calls had been paid on the old shares, and all, except one, on the new; and the present question arose on that one call. On the 4th of September, 1852, a dividend of 4 per cent. was declared, pursuant to the provisions of the deed, and Mr. CLIVE, who shortly after died, made his will early in November, in that year. By it he bequeathed to his widow, during her life or widowhood, the interest and annual income of the shares in question, with others; after her decease or marriage, he bequeathed them over; and he appointed Mr. HENRY CLIVE his executor, who proved the will shortly after the testator's death, which occurred on the 11th of the same month. On the 25th of November, the directors made a call of 5*l.* on each of the new shares, payable on the 1st of January, 1853, and the secretary, on the 23d of December, sent the dividend warrant to the executor, the dividend being in respect of profits for the six months preceding the 2d of September, 1852. The executor and widow, as legatee for life, not being able to agree as to the liability to pay the call, or as to the right to the dividend, a special case, stating all the facts, was prepared, and the following questions were submitted for the opinion of the Court:—1. Whether the fifth call of 5*l.* per share, made on the new shares, and any future calls which may be made on such shares during the widowhood of the defendant, MARY CLIVE, ought to be paid out of the general residuary personal estate of the testator, or by the defendant, MARY CLIVE, out of her own moneys?—2. Whether the dividend on the shares forms part of the residuary estate of the testator, or is payable to the defendant, MARY CLIVE?

The VICE-CHANCELLOR, after having heard the case fully argued, in giving judgment said, that the decision in JACQUES *v.* CHAMBERS, on the hearing before Vice-Chancellor KNIGHT BRUCE (4, Rail Cases, 499), settled the first question; the fifth call, and all future calls on the new shares, must be paid out of the general personal estate of the testator. With respect to the second question, he declared that his first impression strongly inclined against the opinion which he ultimately formed. *Prima facie* regarding the company as a partnership concern, profits which accrued during a testator's life would belong to his personal estate, and it would be difficult to say that a regulation of the partnership, postponing the division of such profits, should alter that rule. In this case, however, the testator must be considered to have known exactly how his interest in this company was taken by him under their Deed of Settlement, and to have been fully apprised of the conditions by which the profits were made payable at a period different from that of their declaration. A well-founded distinction cannot be taken upon the use of the words "interest and annual income arising from my shares," instead of a gift of "the dividends upon all my shares." The testator must have meant some other period for the profits of his shares accruing than the time fixed for making a dividend, and must, therefore, have intended to apportion the income between his estate and his legatee. The dividend must be taken, therefore, to have accrued after his death; and the case must be treated as analogous to a specific legacy of Bank-stock, where the testator had died very shortly before the time appointed for the payment of the dividend. In such a case the legatee would take the dividend, although it might be payable in respect of profits, which had, in fact, accrued during the life-

time of the testator. The 147th clause of the company's deed, however, puts the matter out of all doubt, for by that clause it is clear that the moment a person ceases to be a proprietor, although the profit accrued due during his proprietorship, he is not to be entitled to it until the time fixed for payment; and, therefore, if these shares had been specially bequeathed, and the testator has assented to the bequest, the testator having ceased to be a proprietor before the dividend was declared, the legatee would have become the proprietor of the share, and would be entitled to the dividend. It would not signify that the formal transfer, according to the rules of the society, had not been made, because, by the terms of the deed, the dividend is to be held in suspense until that is done, but in making himself proprietor he would be entitled to the dividend. The testator's estate is not, therefore, entitled to these dividends, under the circumstances of the case, they belong to the legatee; and the second alternative of the last question must be answered in the affirmative.

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The subject of improvements in our steam-vessels is just now occupying a large and a deserved share of public attention; for, while other improvements have progressed in an amazing degree, little has been yet done to place our steam-vessels in the first position for speed and safety. Whilst steam-communication has remained, comparatively speaking, stationary, and the bulk of our steamers career through the water at no greater speed than they did some ten or twelve years since, naval architects, American and colonial, have, by careful study and consideration, turned out from their building-yards substantial and elegant sailing vessels, which have competed successfully with the fastest steamers afloat in crossing the Atlantic, or in the distant voyage to Australia.

Such vessels as the *Marco Polo* and the *Eagle*, the *Mermaid*, the *Red Jacket*, the *Lightning*, the *Flying Cloud*, and the *Sovereign of the Seas*, have eclipsed any previous voyages of sailing-vessels, and made the run of 400 or 500 miles per day of 24 hours—rather the rule than the exception. As has been well observed, our modern steam-fortresses, the giant cruisers of the ocean, have yet attained but to their mid-growth. Our private builders are as yet too much wedded to old plans of construction, and our Admiralty officers can seldom perceive any merit in vessels which have not been built in our great naval ports, or of which the model has not been laid down by a Government draughtsman. The American builders have shown us what can be done, both in the way of beauty and speed, in sailing craft and steamers. Their merchant clippers have far outstripped any vessels yet constructed by English builders, and their river and lake steamers attain a frequent speed of 21 miles per hour—a rate which no British steamer has ever yet attained. A mistaken jealousy, however, still prevails here, and our builders are slow to avail themselves of the plans and lines which have proved so successful on the other side of the Atlantic. We have thrown all our exertions into the beauty, perfection, and strength of the machinery, neglecting, to a great extent, the lines of draught, and the most suitable form of vessel for speed. It has been found in practice, that the larger the vessel—other essentials being proportionate—the greater the speed attained, and the greater the ease and safety of the vessel. Hence, all those American flying vessels exceed 2000 tons. The Liverpool shipowners are just beginning to appreciate this class of vessels, and a large number are now owned by merchants at that port. Large steamers, of light draft of water, would, also, be found most serviceable; and the *Himalaya*, and other vessels of that class, have recently proved their efficiency; but most of our established steam-companies cling with pertinacity to their old hulks of vessels, which are notorious for discomfort and slow passages, rather than construct one or two fast and improved steam-boats, which would be found more serviceable and efficient for the work they have to perform, than the large and expensive fleet of vessels they now maintain. There is, however, we are pleased to find, an awakening to the truth among our merchants and shipowners. We hear mention made of several large and improved steamers under construction, and other and most important plans are being discussed to elevate the character of our steam fleet, naval and mercantile.

We have recently been favoured with the sight of drawings and plans of some large steamers about to be constructed for Mr. Donald Bethune, of Canada, to run on the American lakes, in which, by scientific investigation, careful examination of all the existing steamers of any character, and a combination of the various improvements possible to be carried out. He has united speed, elegance, comfort, safety, and all the other essentials necessary for a lake or ocean steamer, and has surprised those to whom he has communicated his ideas, by the utility of his plans and inventions. He is prepared, in connection with well-known shipbuilders and engineers, to contract for the building of any number of such steamers, which shall have a speed of 21 miles per hour. They can be built ready for sea in about nine months, and at a rate nearly one-half less than the cost of steamers upon the present plan. The letters of scientific men and eminent shipbuilders and nautical men, to whom the plans of dimensions and build of the vessels have been submitted, fully justify the expectation of obtaining the great speed proposed, which is far in advance of any British steamer now running, and we only hope to see their capabilities tested in our own waters; for there are one or two Channel ports which it would be very desirable to place in closer communication with the Continent. How desirable, also, would it be if we now had a fast steamer, of any character, to shorten the distance between Marseilles and Constantinople?

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The system of assurance on lives, and the extent to which it is at present carried, while forming the only secure safeguard to the families of the trading community against destitution, furnish the strongest proofs of the progress of commercial confidence. When we reflect upon the number of persons in the possession of competencies, dependent however on their health and personal exertions, when we remember the numberless variety of mercantile dealings, in many of which the means of payment are contingent on the existence of the debtor, and when we consider the precarious tenure of human life, we cannot feel surprised at the number of insurance companies which of late years have been incorporated for public benefit and protection, while such associations have almost invariably proved in the highest degree prosperous and remunerative to the members who compose them. Society has advanced and improved in a variety of its relations since the original establishment of assurance companies in this country, the standard of human life has been progressively rising, and the rates of their charges falling in an inverse ratio, necessarily tending to the extension of the insurance system. While, however, the long-established companies, originally designed for particular ranks of the community, have been ministering to their requirements, the necessary wants of society have been progressively extending, and new classes, not originally in their contemplation, have been rising into relative importance. The older institutions, framed according to limited views, now apathetic from their accumulated resources, and opposed to speculative alterations, are found unsuited to the new and increasing demands of the people, and while the advance of society indicates and affords fresh objects for legitimate guarantees, it is but one of the many indications of our national progress, that new associations are formed, presenting additional advantages, designed and suited for new classes, and adapting themselves to the improved financial relations and rising institutions of the country.

In some of the prospectuses of the more modern companies, the benefits to be derived from assurances on the lives of persons engaged in mining operations have not been altogether forgotten; and it would be highly desirable that a practice now, we believe, beginning to prevail in some extensive commercial establishments—of insuring the men in their employment against death and accidents—were extended to our great mining concerns. The House of Lords having lately affirmed the proposition, that the proprietors of collieries are liable to the families of their workmen for the consequences of casualties resulting from want of due precaution on their parts, may probably yet have the effect of greatly extending the system of life assurance, as the only effectual means of ample guarantee against all consequences.

We have been particularly struck by the principles on which a society, with a highly influential directory, has been formed in the City of London, under the name of the Ark Indisputable Mutual Assurance Society; the prospectus of which, while it tenders all the advantages offered by former companies, presents some novel ones, peculiarly beneficial, and well meriting marked attention. The society that has been so formed contains an accident department, on the mutual principle, in pursuance of which assurances are proposed to be granted by the society against fatal accidents, or against serious accidents, whether fatal or not. By the terms of its contracts, fixed weekly sums will be allowed during disability arising from any kind of accident which does not terminate fatally, together with a sum for medical expenses, and a fixed sum will be secured, payable at death. It is further proposed to provide for the risk of those engaged in naval and military pursuits, and accordingly policies of assurance will be granted against death or loss of limb by accident or violence from any cause whatever,—advantages likely to be availed of extensively with our existing prospects of a protracted war.

The prospectus very justly observes that this species of insurance will be found particularly valuable to miners, colliers, quarrymen, and others engaged in dangerous occupations, including the numerous classes connected with steam-engines and machinery; and it is proposed that after 10 years of such an assurance without accident, a share in the profits of this department should be payable, on the equitable mutual principle, at his death, to the family of the assured. Although when we consider the vast capital realised by some of the companies formed on the above principle, this participation in profits is by no means a trivial inducement; it will be henceforth unpardonable in any man engaged in a perilous employment, who can afford it, to leave his family dependent on his life, when an opportunity is thus presented of securing, on fair terms, some future provision for them in the event of unexpected calamity.

The company also presents a new, and we believe original feature under the head of the savings bank and life assurance deposit department; the value of which, when fully and securely carried out, must be incalculable to the operative and industrial classes. The society proposes to grant policies of assurance payable at death, according to an actuary's scale, on the deposit of any given sum, with power to the assured, at any time during his life to withdraw the entire or any part of the amount paid, together with the savings banks interest thereon.

It must be obvious that the combining of the savings bank system with a life assurance promises to be one of the most useful improvements yet introduced; and, in directing public attention to it, we do not hesitate to assert that to no industrial class are the proposed advantages more suited than those engaged in mining operations. The wages that they earn are generally ample, so as to render thrift a duty, and the necessity of laying by savings, in effect, a religious obligation. The interest allowed on deposits at the savings bank is inconsiderable; when drawn, it is generally heedlessly and idly spent; and few provident men, when they shall have fully studied the principles on which this society appears to be formed, as detailed at length in the prospectus, will fail to prefer their investment and consequent accumulation as a means of securing ultimate provisions for their families.

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The great importance of Arbitration in all matters of dispute, relating to mining, railways, drainage, patents, water-supply, &c.—indeed, to all real works—is beginning to engage the serious attention of those more immediately concerned. Hitherto, it has been felt by many very spirited litigants that the law on this subject was in an unsatisfactory state; but of late attempts have been made to remedy these defects, and to such purpose that the best results have been achieved, simply by resorting to that most effectual mode of settling differences—by the aid of arbitrators, rather than by proceeding to those extensive lengths which the luxury of law alone allows. Some of the heaviest causes, in which large sums were at stake, and important principles involved, have been confided recently to arbitrators, and settled most advantageously and promptly, after the parties aggrieved had toiled slowly and wearily through legal proceedings without end, and attended court after court, with apparently interminable sittings both in and out of term, without any better effect to either side than that of enhancing costs.

The time has now arrived, and eminently practical minds of this progressing age begin to feel, that the law respecting Awards should be brought a little more in detail before the public, and before the mining world especially; for to them it is doubly advantageous to become conversant with any mode of action that attains so useful an end; and it is our intention to take an early opportunity of bringing the whole subject properly before the attention of our readers.

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The great complaint against the majority of gold companies is that they have withheld not only information from their proprietary, but at the same time they have neither called meetings or rendered accounts. Among those associations which in this particular have attained by no means enviable notoriety, the Ave Maria assumes a pre-eminent position, as now they have not the semblance of an office, and it would seem that the association had quietly expired. This company, we are given to understand, received upwards of 30,000*l.* from the public. Of this large sum, the only portion expended is the money paid for attendances, which figured in a director's schedule, at Portugal-street. From time to time, complaints have appeared that the miners have been deserted in California, and the pittance covenanted to be given to their wives and families withheld. These accusations have been made boldly, and in the face of day; yet to these grave charges the directors have never condescended to reply. Some account should be required how this money has been disbursed. Mr. O'Connor, who was to have been supplied with funds, and with whom they had a contract for working in California, is at present in England, and able to afford every elucidation of the company's affairs in that country, as far as he is concerned. It cannot be supposed that any parties, however willing they may be, can spare the time to communicate with each individual shareholder, as the directors have heretofore shown great unwillingness to meet their constituency; these would do well now to look after their own interest. A committee should be formed, possessing the confidence of the general body, having power to consult with Mr. O'Connor. He can inform them of the position of affairs in California, and the manner in which the directors have fulfilled their agreements with him. We know not what revelations he may make, or how the affairs of the association stand: they cannot be worse, nor the shares of a more depreciated value than they are at present. The shareholders have now the opportunity of obtaining the information they have so long sought, and must not complain if they do not avail themselves of the chance which is now afforded; while the arrival of Mr. O'Connor in England will enable the directors to render an account of how they have managed the capital committed to their care, both at home and abroad.

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In our last Journal we published a short statement of the case of James Eckley Prockter, innkeeper and dealer in shares, of Launceston, which came on for adjudication, on Tuesday, the 10th October, before the Exeter District Court of Bankruptcy. The disclosures made on the examination of the bankrupt have been since published at greater length, and have attracted much notice, as public attention is ever directed with peculiar anxiety to mining operations in Cornwall. The great variety of mining enterprises in that district, and the success which has, in so many instances, attended them, has necessarily been prolific of frauds; but, in the name of common sense and common justice, we protest against the supposition that transactions of that nature, in that county, are open to the suspicions that such a system as disclosed in that case is generally or at all prevalent throughout that county. It would be strange, indeed, if mining adventures, carried on to a vast extent, and in a very remote district, should be enabled to claim exception from practices which are found to prevail even in the very centre of this metropolis, and within the purview of our highest courts of judicature. It ought, however, to be distinctly understood, that cost-book companies, however limited in their extent, and although regulated by local customs, are not privileged or exempt from the strict rules which define and declare what circumstances create and constitute legal and equitable fraud. Those who are engaged in mining operations in Cornwall would do well, therefore, to remember, that the transactions of cost-book associations, formed for the purpose of managing local mines, are not freed from the ordinary rules and principles of honesty and fair dealing; and that amongst the powers with which directors and pursers are invested, they are not authorised by their shareholders to commit or sanction fraud. Secrecy, misrepresentation, and falsehood, have been at all times generally considered its chief badges, and few dealings, of any nature, have ever stood impeachment which have been characterised or mixed up with either.

We have been induced to make these general observations from some circumstances which were revealed during the investigation of the case in question, and from the very improper purposes to which the cost-book, and the power of making entries in it, appear to have been made subservient. We have no hesitation in boldly asserting, that in order to give legal validity to the cost-book of a mine, it ought to be a *bona fide* record of actual transactions, which really occurred as they are represented, and that the entries which purport to detail them ought to be substantially true. In this case we find entries of meetings purely and entirely fictitious, resolutions pretended to have been entered into by parties who were never present, and signatures of names affixed without the shadow or semblance of authority. We find the bankrupt, who filled the responsible and fiduciary position of purser, being, in effect, a trustee as well as an agent of the shareholders, reconciling himself to those departures from our common notions of ordinary propriety, by assuring the Court before which he appeared, that he was advised that the very acts which, in effect, vitiated and rendered void such proceedings, were actually essential to their validity. We could not imagine who the adviser in this case, described as a person conversant with mining operations, could have been, but we were fully prepared to declare that, whoever the party might be, who had ventured to assert that fictitious entries of bi-monthly meetings, which meetings never took place, rendered the proceedings of a cost-book mine legal, must have been grossly ignorant of the subject, and grossly criminal in hazarding such opinions. We have since received a communication from Mr. John D. Young, the gentleman who, we presume, was alluded to, and which we publish in another column, by which it would appear that the imputations were as unfounded as the entries were fictitious.

We are far from being surprised that the publication of such proceedings should produce effects highly injurious to the character and value of associations for mining purposes, but the notions that it was necessary to have an assumed committee, when none such was ever named or formed, and that it was competent for an ignorant Cornish purser to create companies, and bind the rights of individuals by the signature of their names, without their knowledge or sanction, are in themselves so preposterous, that they carry in their very absurdity their refutation. While we lament the discreditable occurrences which sometimes occur, and which we never seek to conceal, we deem it grossly unjust that a large and important branch of our national industry should be stigmatised in consequence of the ignorance or delinquencies of a few. Transactions, often highly reprehensible in individuals, are of daily occurrence in the wide-spread relations of our extensive trade, but they are never selected as pretexts for casting general imputations on the great commercial body. In the name of the mining community, and of the spirit of commercial enterprise, which characterises the department of our national industry, to the sustainment of which we are peculiarly devoted, we protest against disclosures such as these being considered applicable to, or as justifying reproaches on, the mining interest. We cannot avoid expressing our surprise at the tenderness with which the bankrupt was treated in this case; he was possibly excused on the false supposition that he had acted under the erroneous advice which we have so strongly censured. Extensive associations have been formed, and are in active and successful operation, for the protection of various branches of trade, and if the Legislature shall not, in the proposed regulations respecting joint-stock companies, speedily place mining transactions under proper control, the formation of a mining protection society will, probably, be deemed indispensable, having, for its main and legitimate object the prevention and detection of fraud.

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## STOCK, MINING, AND RAILWAY SHARES IN IRELAND.

[FROM OUR CORRESPONDENT IN DUBLIN.]

Oct. 26.—The proceedings of the week in our "Room" require but little space to narrate; and as the remarks I have lately made with reference to the absence of operations appear not to meet with the approval of certain members, and who are loud in their complaints, I shall in future leave the business of the "Room" to be best explained and understood by the daily quotations, which, for your guidance, you shall have more precisely particularised for the future.

There has been but little doing in Funds or Shares; however, the following will suffice:—19th inst. Consols, 93¾; National Bank of Ireland, 26 (the only transactions in Banks, Steam, Miscellaneous, and Mines): three quotations in Railways—Great Southern and Western, 46; Dublin and Wicklow, 5⅞; Midland Great Western, 46¾.

20th. Consols, 93¾; Royal Bank of Ireland, 19; Consumers' Gas Company, 8¼ ex div.; Dublin and Belfast Junction, 42¼ (paid in full, 47); Great Southern and Western, 46; Midland Great Western, 46½ for account.

21st. Consols, 93¾; Dublin Steam-Ship Building, 48; Mining Company of Ireland, for account, 17¾; and one transaction in Great Southern and Western Railway, 43; Waterford and Limerick, 24½ 24.

23d. Consols, 93¾; Dublin and Kingstown Railway Debentures, 100½; Royal Bank of Ireland, 19; Dublin and Liverpool Steam-Ship Building, 48; Grand Canal Company, 42; Irish Consols, 4s.; Dublin and Belfast Junction, 42¼; Dundalk and Enniskillen, 13; Great Southern and Western, 46; Midland Great Western, 46¾; Waterford and Kilkenny, 4½.

24th. No business in the Government Funds. Hibernian Joint-Stock Bank done at 31½; National Bank, 26¼; Dublin and Liverpool Steam-Ship Building Company, 49; Irish Consols, 4s.; National Insurance, 25; Patriotic Insurance, 7½; Consumers' Gas, 8½ ex div.; Dublin and Belfast Railway, 42¼; Dublin and Wicklow, 5½; Great Southern and Western, 45¾ ⅜; Midland Great Western, 46¾.

25th. Consols, 93½ ¾; Hibernian Joint-Stock Bank, 31½; Consumers' Gas, 8¼. No business in Mines. Railways—Belfast and Ballymena, 44½; Cork and Passage, 14; Waterford and Tramore, 3⅜.

26th. Nothing doing in Consols for money or account. Grand Canal, 41. Nothing doing in Banks, Mines, or Miscellaneous shares. In Railways, Great Southern and Western, 45¼ money, and 45⅛ 45 for account; Midland Great Western, 46⅜ ½ money, 46½ for account.

The lengthened report of the deputation to the mines of the General Mining Company for Ireland, submitted to the directors of the company, by two of its members, has been laid before me, of which the following abstract will best convey the information acquired by those gentlemen, and their recommendations for the future working. The information as to the state of the mine and its prospects, it is only right to observe, were rendered by Capt. Hambly, who alone can be considered responsible for the representations made, the object being rather to collate practical observation and opinions, than to advance any theory they might themselves entertain:—

Ballinoe Mine.—A new adit is in course of driving, having for its object the cutting and unwatering of the Great Gurtnadyne copper and lead lode; this has been driven 20 fms., and it is expected it will require to be extended 60 fms. further, the cost being set down at about 5*l.* per fm. A sulphur lode about 5 fms. wide, or 30 ft., has been intersected in course of driving the adit, which latter is being driven on a caunter or cross lode, which intersects the great Gurtnadyne lode referred to. The shaft, which fell in about two years since, produced from a depth of 8 fms., and 13 fms. being the extreme, fine copper ore; the present adit in course of driving will unwater the lode to the 30, thus giving 17 fms. of backs. The Ballinoe new shaft produces good lead and some copper ore, and it is the opinion of Capt. Hambly, if sunk 20 fms. deeper, that it would prove very productive.

Garryarde.—The driving of the adit here, which had been discontinued, has been resumed, and is now within 10 or 12 fms. of the Gurtnadyne great lode.

Gurtnadyne.—The engine-house is complete, but the crushing-house is not covered in. The cistern and main crank had not then arrived. [They we believe, however, did subsequent to the report, and have been fixed in their place.] No part of the machinery of the steam-engine had then been put up. About 8 men and 60 children were employed dressing ore at surface. Of the new adit in course of driving there remained about 30 fms. to intersect the lode, the water at present being drawn by a 4-horse engine and men with buckets, an expensive mode. Capt. Hambly reports on the completion of this adit, which may be attended with a cost of 6*l.* per fm. The lode will be unwatered to a depth of 25 or 26 fms. A round buddle has been erected to clean the slime, which is represented as having before been thrown away as useless, and it is supposed that it will return 1 ton of lead to every 10 tons of slime, or, in other words, one-tenth.

New Discovery.—A lode has been cut about 6 feet wide, and produces good ore; there are also parallel lodes or veins.

Shallee.—Of this portion of the sett no report is made.

The Miners.—It would appear that in consequence of their not being paid regularly they had required a weekly "subsist," while the deputation state that about 200*l.* had been advanced to the miners on ores not yet returned; and also convey their impression that the ores raised will not yield the amount of the advances made, and moreover that it will take at least two months to dress the ore and ascertain the quantity.

Halvans.—From the information acquired from Capt. Hambly, it would appear that, in his opinion, the halvans, skimpings, &c., at Shallee and Gurtnadyne, may be estimated at about 4000 tons of halvans, and that every 15 tons of halvans would produce about 1 ton of dressed ore, the expense of dressing being 2*l.* 10*s.* to 3*l.* per ton. It is also his opinion that there may be about 3000 tons of skimpings, and that it will take about 25 tons to yield a ton of dressed ore, the expense of dressing which he calculates at 2*l.* The deputation very properly observe that the produce from the halvans and skimpings cannot be rendered immediately available, as the dressing of them, and rendering them marketable, will cover a space of at least three or four years. As a summary of the opinions entertained by the deputation, it is set forth—1. That the various adits should be carried on with the greatest energy.—2. That the large reservoir having been formed on ground formerly excavated, and not being water-tight, a considerable outlay would be necessary to effect this, so as to render it available.—3. The committee recommend a tramroad being laid down at surface, to economise and facilitate the transport of the ores and halvans to the crusher or dressing-floors.—4. The erection of an additional round buddle machine.—5. The putting together and getting into effective working, with the least possible delay, the steam-engines and buildings connected therewith.—6. A line to be drawn between the office and duties of the mining agent and cashier or clerk.—7. A proper system of book-keeping; copies to be transmitted weekly.—8. An inventory and valuation of the company's stock and effects, to be taken every six months.—9. The abolition of the system of giving subsist to the men, and weekly payments to be made, with monthly settlements. Such are the recommendations of the committee, who thus close their report:—"Your committee were much impressed with the great value of the company's mining property; it is of great extent, and apparently full of rich ores, and if the mines are worked with prudence and energy, the committee believe a most ample return will be yielded to the proprietors; but to bring the mines into a state of efficiency and profit, the outlay of a considerable amount of money will undoubtedly be required."—The report is dated Dublin, Oct. 6, and signed—J. Elliott, T. Millar.

A meeting of the directors was summoned for Tuesday last, the result of which I have not yet learned; the object, however, was to discuss the

report, and to determine on the propriety of making a call, to meet debts, liabilities, and current expenses. The last paragraph of the report is highly satisfactory and pleasing, as bearing out the reports I have ever made on the value of the property possessed by the company; while, I repeat, it only wants capital properly employed, and which is essentially necessary, to render this concern one taking a high position in the mining enterprise of Ireland. They have arrived now at that point when resolve is necessary,—money must be forthcoming, not only to endeavour to restore their full credit, but to do justice to the mines and adventurers.

You are very funny people on your side, and, like the story of the drummer and the private, "strike high or strike low," neither one nor other would seem to please or satisfy. Now, you had a meeting of the Carbery West Mining Company last week, and your "correspondent," it would appear, got roughly handled, but, nevertheless, I will stand by my position, and endeavour, at least, to maintain my ground. I may just as well take the report as you give it, and offer my comments *en passant*, Capt. Treweeke expresses his strong conviction that the mine "will, on development, turn out profitable, it having every desirable feature, and in perfectly ore-bearing ground;" while he adds, "had the engine-shaft been sunk 40 fms. further west, in all probability important discoveries would ere this have been made." We are then told that "the lode is strong and continuous, and evidently improves in going down," "and in many places where it crops out to the surface strong indications of copper may be seen." He tells us, then, that the lodes "are richly impregnated with real copper ore." This gentleman states he is "a *real* miner, of long and extensive experience, and not a pretender;" he proceeds to talk of some "individual's silly twaddle," but who the individual is I cannot learn on this side the Channel.

It appears from Mr. Foley's report, "about 3000*l.* would do wonders." Surely wonders will never cease. How many prognostications has St. Pierre Foley made, and how few have been realised? While, although that scientific gentleman explained how little he had received for services rendered, he forgot to mention the free shares which he obtained, and which we must consider as taken for a consideration. Query—How was the company formed? who its projectors? what the purchase-money? what number of shares subscribed for? Indeed, Sir, I am, from the example set me by your able and intelligent correspondent, Mr. Guedalla, much disposed to think that there are as many questionable schemes here as in Australia and California,—all concocted on your side, and of which we are made the victims. However, there must be an end to this, and continued exposure will effect the object desired, and give fair play to the capitalist. The chairman, it appears, descended, or, rather, condescended, to notice "the course pursued by the Dublin correspondent," which he (Mr. Peter) stated "was calculated to destroy all confidence in the Irish reports in that paper." On this it is hardly worth while to waste a word. An independent Irish correspondent will never suit the London needy and greedy adventurer. We know more of this matter, and the proposed arrangement, than, perhaps, the chairman apprehends. What think the shareholders of an amalgamation with some other Irish mine which may be *consol*-idated therewith? Let them be cautious, and place not too much reliance on representations made. It appears, from the report of the chairman, that out of 30,000 shares, only 16,455 were issued, and 13,545 were "in reserve." Did the projectors, I would ask, get the entire free shares, or purchase-money, as if the whole number were issued and the capital raised, or were they content with a moiety, or a little more, on the shares taken up? And, moreover, out of the 16,455 shares now said to constitute the company, how many are held by St. Pierre Foley and others free? I hope I am not wrong in drawing the conclusions which appear to me too apparent; but as Mr. St. Pierre Foley has attempted an explanation, I think he may as well add a postscript.

As to the observation of Mr. Lucas—"it was evident that the correspondent of the *Mining Journal* was actuated by some personal feeling against Mr. Foley," I can only observe, *his* lengthened lucubrations were cut down in my notes, while I transmitted the original to you. This, perhaps, did not meet the object in view; but he should not throw censure on those who have aided him. Perhaps the proposed arrangements may accord with his wishes. I hope such is the case; but let those who are interested be "wily."

One word as to the Leigheloon Mining Company, lately known as the "Roaring of the Waters." Mr. Arthur Dean, C.E., it appears, has made a lengthened report on this resuscitated mine, which has occasionally met with notice in your columns; and with the "promising features enumerated" in that gentleman's report, it seems somewhat strange that nothing was effectively done by the former adventurers; while the same agent, Capt. Henry Thomas, would appear to be the one selected for the new company. The mine, I presume, has not altered in its appearance or productiveness with its change of name. I observe, by-the-bye, that you have inserted it in your Share List, although Roaring Waters was not so honoured, at least for the last six months, for I have not a file by me of longer date. Without following the report, or wading through its details, I observe Mr. Dean is of opinion that "it would be premature to fix the site of the engine-shaft or to erect machinery at present, because there is yet much to be learned as to the position of the lodes in contact with the caunter" Mr. Dean is, moreover, of opinion that the lodes are rich for gold, as "numerous assays have already shown a produce varying from 1 oz. to 1¾ oz. to the ton." Mr. Dean, however, states that he has "hitherto looked at the property as for copper only, and of that the promise is sufficiently encouraging to justify me in recommending vigorous measures for the development of themine."

I regret that I have nothing of interest to communicate with reference to mining operations in this country, but next week I am promised information from one or two quarters, the result of personal enquiry.

## THE IRON AND METAL TRADES OF SOUTH STAFFORDSHIRE.

[FROM OUR CORRESPONDENT IN BIRMINGHAM.]

Oct. 26.—The past has been another exceedingly dull week in the general manufacturing trade of the district. Everything seems to participate in the suspense and anxiety consequent upon the uncertain position of the combatants in the Crimea, and capitalists are anxiously awaiting the result of the intelligence, which, it is hoped, will settle the campaign for the winter, and leave time for recruiting strength and confidence. Add to the war, the unexpected and, apparently, most unjustifiable rise in the price of bread, which is now weekly taking place, and there is little difficulty in accounting for the increased inactivity of trade, which has reduced the hands in many large works from six to four days' labour, and threatens still further diminution if a favourable change does not take place. The short time, however, has not as yet extended to the iron-works, in which the make of iron continues in full, although the demand has not been so great as heretofore. The orders for iron during the week for the American market are reported on the increase, and the last arrival has brought some orders for rails, which were said to have been waiting a favourable turn in commercial transactions. The intelligence from America is much more satisfactory, and the buyers here for the States, finding the decision of the quarterly meetings against a reduction, have given orders which they kept in abeyance. There have, also, been some brisk contracts advertised in connection with our own lines of railways, and these, coupled with the war requirements, sustains the trade, and are likely to do so throughout the winter. Ironstone, coal, and labour, continue the same as last week; and so long as there is no abatement in the value of these essentials, best iron will necessarily maintain its price, although inferior quality, in the hands of small makers, may undergo a reduction, and in some instances have gone down.

The demand for Coal continues, and the wharfs and banks are, comparatively, stockless. There has not been any reduction in the price of either furnace or house coal, and there is no probability of any immediate change unless the short time should continue, and extend to more of the large works than have as yet adopted it.

Copper is still reported scarce, although the manufacturers are not consuming anything like their average quantity. I believe, however, the scarcity now felt is, in part, the result of the dealers being thrown almost entirely on the new metal. During the last eighteen months there has been a most extensive trade carried on in old copper, in consequence of the high price of new. The old, however, is now run out, and cannot be had in any of the large towns from whence good supplies were usually obtained. The travellers who are out report old copper as impossible to be had, and the smelters and others are firmly maintaining prices. In the other metals there has not been any change, and prices are also steady.

In the general Hardware Trade, the demand during the week has been very dull, and in some branches very few orders have been received, and there is evidently increased pressure on the poor rates. One branch in particular, in which a very large number of hands are engaged, is suffering considerably. I allude to the pearl button making, which is carried on here very extensively, and has undergone many vicissitudes, in consequence of the extraordinary rise in the price of the raw material. Best buffalo shell now sells at 25*l.* per ton. Scotch shell, which in the year 1851 sold at 40*l.* per ton, now realises 70*l.* Singapore, which was 72*l.*, is now 150*l.* This extraordinary advance is attributable, in part, to the scarcity of shell at the great fisheries, and the competition for it. The Germans and French having of late directed their attention to the manufacture of sundry articles from the shell, they have become extensive competitors with us, and it is rarely we now see advertised any very attractive sales. The largest which has been of late was that of 165 tons, for which a house here has become the purchaser at a high price. Owing to the increase in price, manufacturers have been substituting materials of various kinds, and the changes thus made in the process of manufacture, also, necessarily embarrasses the trade.

The Jewellery Business is also dull, but there is a good deal of Australian gold in the hands of the refiners, and it is said to be of fine quality. It is almost incredible the quantity of gold which returns to Australia in the shape of brooches, rings, pins, and various other ornaments. Some of the purest nuggets found in the mines are sent over for the purpose of being converted into fancy articles, for presentation to friends, &c.

In the Electro-Plating, Messrs. Elkington are busy, and have some brisk orders in course of execution; and most of the leading houses, entered for the French Exhibition, are devoting all their spare time to the manufacture of some of the choicest articles. The number of exhibitors from Birmingham will not be so great as might have been expected, but those who have entered are spiritedly carrying out their designs, and will, no doubt, maintain the high character which they achieved at the London and Dublin Exhibitions.

## IRON AND COAL TRADES OF YORKSHIRE AND DERBYSHIRE.

[FROM OUR CORRESPONDENT IN CHESTERFIELD.]

Oct. 27.—Although the Birmingham journals report that inferior qualities of iron are to be purchased in Staffordshire below the nominal prices of quarter-day, we hear of no deviation in Yorkshire or Derbyshire from the prices fixed at the quarterly meetings, nor do we think there is any prospect of a change, as all the makers are well employed; and though the present high prices of pig-iron, coal, and other materials, do not render the rates more than remunerative, there are, however, cinder pigs in the Staffordshire markets at prices from 20s. to 30s. per ton below the value of mine pigs; and these will enable the makers of inferior qualities of iron to sell considerably below existing rates. Orders are well received, and as the period approaches for merchants to renew their stocks, to supply the winter demand, there need be no apprehension of a decline. Scotch pigs have slightly receded since our last, partly owing to the absence of speculation, and partly to the uncertain aspect of political affairs. We are glad, however, to notice that the American houses have been less affected by the commercial pressure than it was expected they would be, and that there are reasonable grounds for hoping that the worst period of financial difficulty is past.

The Steel Trade must be reported less buoyant than for some time past, the table-knife and cutlery trades, at Sheffield, being in a lifeless state; but there still exists a good demand for steel for railway purposes.

The Town Council are determined to enforce the bye-law with regard to the consumption of smoke, and much division of opinion exists as to the best apparatus for effecting the same. The smoke-consumers have organised themselves into a committee, to ascertain the best plan, and the difficulty at present appears to be to make a choice. The patented plan of Mr. Lee Stevens, and one invented by Mr. Ashbury, of Sheffield, appear, as far as we can learn, to be under consideration and trial at the Sheffield Colliery, where two engines are working in the same house, and connected with which are three cylindrical boilers. To one of these Mr. Stevens's plan is applied, and to another that of Mr. Ashbury, the third boiler without any plan for consuming smoke. The council have also received a communicated from Lord Palmerston in reference to the application for a new law, to check the practice adopted by outworkers in the misappropriation of material. His lordship wished to know what actions had been brought for the misappropriation of such materials, and what had been the result; and that, if no such proceedings had been resorted to, it appeared to his lordship to be advisable that they should be tried, before new and more stringent enactments were asked for from Parliament. The town clerk replied to Lord Palmerston's communication, informing him that the expense, delay, and trouble attending civil actions deterred masters from resorting to such proceedings. If an action were tried at the assizes, it would involve a cost of 40*l.* or 50*l.*, and a delay of four or five months, which would be a complete bar to any redress, as no master would incur that cost and trouble to recover materials, perhaps not worth more than 20s. or 30s. The Cutler's Company have coincided with the views of the council, and a new Act will, in all probability, be applied for during the next session.

The Coal Trade remains pretty much in the same state as last reported. The advance has been steadily maintained, and the demand has somewhat increased. It is difficult to say, in the present aspect of affairs, how far prices may be affected when the winter demand has fully set in; because, as yet, it has only been partially felt. New coal-pits are being sunk in all directions, and production at those collieries now in operation is going on to its fullest extent. We fear that the main difficulty, with regard to these increased supplies, will be the inability of the railway companies, with their present quantity of mineral wagons, to meet the requirements of the additional mineral traffic. We are bound to state, however, that several companies are making extensive additions to their rolling stocks, for the purpose of facilitating the transit of minerals, which are becoming, on several lines of railways, more remunerative than the ordinary passenger traffic. A striking instance in support of the opinion that there has hitherto been a great deficiency in the supply of railway wagons, may be induced from the fact that the Midland Wagon Company, at the last half-yearly meeting, reported an increase in the income over the previous half-year of 13½ per cent.

The reports we have received during the week from the lead mines in the Peak of Derbyshire are extremely favourable, and afford strong evidence of the mineral wealth of Derbyshire.

The Over Haddon Mine is still being worked, but with what results we are not at present enabled to say. The reports from the "Derbyshire California," as it is commonly termed, have been like angels' visits, "few and far between." There is, however, a considerable quantity of ore at surface, which, as far as the naked eye can judge, promises to yield well when properly dressed. The leading promoters of the mine are now in treaty with a London house, for the purchase of a machine for dressing the ore, after which we shall probably be in a position to give some practical information in reference to the mine. It has been an excellent "spec." for several of the proprietors already, the shares in the undertaking being only about 5*s.*, before the discovery of the precious metal; they are now from 25*l.* to 30*l.*!

## THE METAL TRADE, AND COMMERCE OF SCOTLAND.

[FROM OUR OWN CORRESPONDENT.]

Glasgow, Oct. 26.—In the Pig-iron market there has been a greater disposition to sell, and prices are a shade lower; a reduction of 6d. per ton was yesterday submitted to. Mixed numbers, 80s. 3d. to 80s. 9d., according to terms of payment; No. 1, g.m.b., 82s. 6d.; No. 3, 79s. 6d. to 80s. The exports of iron from the Clyde last week were—Coastwise, pigs, 2287 tons; foreign, pigs, 1408 tons, value 5774*l.*; bars, castings, machinery, &c., 120 tons, value 2850*l.* From Ardrossan—Foreign, pigs, 752 tons; coastwise, pigs, 2341 tons.

This being what is called the half-yearly sacramental fast day among the Presbyterian Churches, business is entirely suspended. All shops, warehouses, &c., are closed, although the principals of our mercantile firms are paying their wonted visit to the news rooms, and having a quiet hour or two in their counting-house sanctums. There are services twice a day at the Established Churches and those of the two leading dissenting bodies—viz., the United Presbyterian and Free Churches, but the attendance when the weather is fine, as it is to-day, is very meagre. There is still a small section of the community who have a superstitious feeling with regard to this day, but with the leading mercantile men it is a half or whole holiday, and the intelligent of the working men look forward to it as a day for visiting friends and relatives in the country, or enjoying a trip by rail or steamer down our beautiful river to the locks and watering places. The morning was keen, with a sharp frost, but the atmosphere unusually clear and bright with the rising sun, which is very fortunate, as our days of recreation in the north are by far too few and far between. Every steamer which left the Broomielaw was crowded with passengers, and the stations of the various railway companies had a busy and animated appearance. The Edinburgh section of the Caledonian Railway did an immense amount of business with their 1s. and 2s. fares to the modern Athens, and this being also the Edinburgh fast day, thousands of our eastern neighbours are to be seen pouring down the streets leading from the Buchanan-street station. The traffic on the Caledonian Railway exhibited an increase of 1200*l.* on the last week; it is likely to be better still this week. The rival line, the Edinburgh and Glasgow, showed a deficiency last week in its returns, which is likely to be partly made up by its share of this week's excursionists, there being quite as much play as business during the latter half of the preaching week.

In our Local Railway and other shares prices have in most instances been drooping, particularly Edinburgh and Glasgows.

Bank discounts still continue high, 5¼ to 5½ per cent. per annum.

Our Engineers and Iron Shipbuilders are pretty well employed. The contracts of the Jordan Hill Yard are being completed, under the superintendence of the trustees, for behoof of the creditors.

The Commercial Bank of Scotland have commenced the erection of very extensive new buildings in Gordon-street; the foundation-stone was laid with the usual ceremonies, in presence of the directors, a few days since, the plumber work for which has been entrusted to the highly respectable firm of T. Leadbetter, and Co., of this city.

The General Trade of the city, among plumbers, brassfounders, coppersmiths, and other metal workers, is in a thriving condition, and prices of materials still keep high, with an advancing tendency.—William Johnston, Metal Merchant.

## COLLIERY VENTILATION—IMPROVED MODE OF WORKING.

On so many occasions has it been our task to call public attention to practical essays on the operations in coal mines, by writers both of scientific eminence and manual experience, that it might be thought nothing of novelty or importance could be further brought forward on the subject. It is, however, a question of such grave national importance, and one by which the moral tone, the health, and the lives of a large portion of the population are affected, that all who can add their mite of information, and the results of their experience, to the literature of the day deserve well of their country. We have before us, in a small volume, by Mr. Joseph Marlor, of Oldham, an investigation into the principles of coal mining, and a description of a new system of working and ventilation combined, patented by the author. Mr. Marlor is evidently a practical man; he states in his preface that he has been connected with the mine from boyhood, has had a singe, a broken limb, and many narrow escapes for his life, and his opinions are undoubtedly worthy attention. As far as his own observation has led him to form an opinion, he considers the works hitherto published on this subject have failed to secure the desired end; that there is wanting a better organisation, and a more comprehensive and efficient system. In these pages he clearly describes the different modes of working, what improvements have been effected, and suggests or recommends others, giving details of the best modes of operation connected with great and difficult undertakings. The existence of local contracted prejudice is acknowledged, but the author considers the day not far distant when great and real improvements will be effected, when old and faulty systems will be expelled, and new and better ones established in their stead. The grand panacea recommended, a feeling highly creditable to the writer, is a systematic course of education for colliery operatives, particularly combining the principles and practice of mining operations and ventilation, to be properly illustrated, and the pupils to be supplied with suitable elementary works.

The system of working and ventilation recommended by the author, he considers, if fairly carried out, would secure the object he has in view—the prevention of explosions in coal mines, and insuring in other respects greater safety in working. It consists in fixing within the shaft, extending from top to bottom, a tube or tubes, constructed of wood or iron, or both, either square or circular. Within these tubes the cages ascend and descend, carrying coal wagons, materials, and men. In the top of the cage are placed two or more valves, opening inwards, and at the sides two or more lateral valves, so fixed that they may be forced outwards by the pressure of the air during the descent of the cage; when ascending these valves are closed to the sides, and all friction between the cage and the sides of the tube is removed. At the bottom of the tube is a door, communicating with the mine, and also an injection valve, by which the air contained in the tube is driven into the workings during the descent of the cage. In the bottom of the cage is a valve or trap, which is closed during its descent, and thus all the air contained in the tube is driven into the mine, in addition to the usual ventilation; on ascending it is opened, that the cage may meet no resistance from the air above. Supposing the tubes 4 feet square, or 16 feet area, and 300 yards deep, there would be 14,400 cubic ft. of fresh air driven into the workings at every descent, in addition to that obtained by the usual arrangements. The advantages claimed for this system are—Improved ventilation in all cases, and the deeper the pit the greater the quantity of air; nothing can fall on the workmen; the pit will be always dry in the winding department; and the smoke and heat from the furnace will not affect persons going up or down, or injure the ropes or machinery. In case of an explosion these tubes would not be disarranged, and the author requests only a fair trial of the above suggestions, convinced of the efficiency of the plan, and that it would soon lead to more considerable improvement, and still greater amelioration of the condition of the working collier.

## THE ASTRONOMER ROYAL IN A COAL PIT.

The Astronomer Royal, Prof. Airey, has been engaged in the north during the past three weeks pursuing a series of interesting and delicate experiments, with a view of determining some important questions with regard to the density of the earth. The learned Professor has been assisted in his important investigations by a staff of assistants from different observatories in the kingdom.

Mr. Dunkin, of the Royal Observatory, Greenwich, who, in the absence of the Astronomer Royal, had charge of the experiments; Mr. Ellis, also of the Royal Observatory; Mr. Pogson, of the Radcliffe Observatory, Oxford; Mr. Rumker, of the Durham Observatory; Mr. Criswick, of Cambridge Observatory; and Mr. Simmonds, of Mr. Carrington's private observatory, Red-hill, Surrey, have been engaged making daily observations.

Hatton Colliery, which was the scene of these important observations, is about two miles south of South Shields, and is well adapted for the purpose, being one of the deepest coal mines in the neighbourhood. The lower station was 1260 feet below the surface of the earth. The observations consisted in noting the vibrations of an invariable pendulum on the surface, and another at the bottom of the mine, both being mounted on iron stands in a manner similar to each other. These pendulums hang on knife edges, resting on agate planes, thus sustaining little resistance from friction. If swung in vacuo, the vibrations would probably continued for 24 hours, and in their state as used, though liable to hinderance from atmospheric causes, yet the vibrations continued at least eight or nine hours. Corrections were applied to the results from the effect of temperature, and also for boyancy, or the effect produced by the pressure of the air on the pendulum. The vibrations were counted by the assistance of a clock, which was mounted immediately behind the detached pendulum; and thus, by the aid of the clock, the number of vibrations in a certain time could be easily noted. The method was simply this:—To the centre of the bob of the clock pendulum was attached a small oval-shaped disc, covered with gold-leaf, and illuminated by a lamp. It was necessary in the adjustments that this disc, when stationary, should be hid by the detached pendulum, and that there should be a slit in the clock case, which should also be just covered by it. A line, therefore, drawn through the centre of the telescope, which was placed at a little distance through the detached pendulum, the slit in the clock case, and the illuminated disc on the clock pendulum, should be a straight line. Suppose the two pendulums were set swinging, we should then perceive that one was vibrating faster than the other, and that the disc would be gradually approaching the detached pendulum until it would be completely hid, and both pendulums would be going exactly together. This was called a coincidence, and was carefully noted to the nearest second of time. When the illuminated disc reappeared, which was generally in a few seconds, one pendulum still continued gaining on the other, until another coincidence took place, the time was again noted, and thus we have the interval of coincidence, or the time occupied in one pendulum gaining two seconds over the other. The rate of one pendulum was easily found; and as this operation was performed simultaneously at the upper and lower stations, nothing remained but the comparison of the two clocks. In the Astronomer Royal's former experiments in Cornwall this was the most difficult part of the operation. At that time it was necessary to fasten the chronometers to the body by means of straps, and then to ascend or descend by perpendicular ladders, a journey which occupied considerably more than an hour in its accomplishment. In the present experiment this section of the observations was quite, if not more, satisfactory than the observation of coincidences, owing to the adaptation of galvanism to astronomical purposes, and by this means the comparison of the clocks was effected. A wire coated with gutta percha passed from one pole of the battery through a clock, which was so arranged as to push a spring, causing a galvanic circuit every 15 seconds; from the clock the wire passed through a galvanometer attached to the clock-case at the upper station, thence underground to the shaft, down which it descended to the lower station, when it passed through another galvanometer also attached to the lower clock-case; it then returned up the shaft to the other pole of the battery, and thus the circuit was completed. Signals were simultaneously observed by the observer at the upper and lower stations, which gave a direct comparison of the two clocks. By this means every element for the determination of the gain or loss of the upper pendulum over the lower, and consequently the difference of the force of gravity acting on both pendulums, was formed by calculation The observations extended over a period of three weeks, the pendulums remaining the first week in the same position. In the second week they were

reversed, so as to eliminate any error which may attach to either pendulum. In the third week they were reversed, in the middle of the week. No result has yet been obtained, and the discussion of the large mass of observations will require considerable time and attention, but enough has been done to show that the observations are of a very superior character, and it is the Astronomer Royal's opinion that most valuable results will be obtained from them.

## ON SCIENCE IN THE MINES.

BY HERBERT MACKWORTH M.INST.C.E., INSPECTOR OF COAL MINES.*

The want of popular information on the subject of mining may cause "Science in the Mines" to be looked upon, by many, as involving more difficulties and mysteries than the other subjects to be found in the programme of educational lectures. By the aid of a little science, to explain and to illustrate, these difficulties will disappear; the empiricisms of the practical man will be found to belong to general rules, and the art of mining will be shown in each step of its development to be indebted to the labours of practical men of science. To prove this close relation, it might almost suffice to recall the names of those who have led the way in the improvement of the art; of Smeaton, Watt, Stephenson, Davy, Buddle, Wood, and Taylor in our own land, and of Werner, Humboldt, and Combes on the Continent. But to convince a miner (than whom no one adheres more stoutly to that much abused title, "a practical man") of the full scope and power of his auxiliary, a close investigation is necessary.

Experience is the foundation of science and skill. Reasoning on the results of previous labours, in order to overcome a difficulty of a new or a greater kind, is identical with the inductive process of the man of science. If it were possible to find a man to no way indebted to science, even the most rudimentary, such as the practical man assumes himself to be, he could copy or re-produce, but not better than many machines, and would be infinitely surpassed by them in economy and power. The instances are, unfortunately, very numerous where the practical man affects to despise the experience of others or the aid of science: he is ignorant because he restricts himself to his own limited experience; he occasionally indulges in the wildest speculations, because he will not understand the reason of what he does and sees; and certainly the mistakes which have been committed by the abuse of science are not to be laid in the balance with the enormous sums of money which are day by day squandered in this country by entrusting the charge of works, often involving novelty and improvement, to the hands of ignorant or uneducated men. I am not underrating the value of practical experiment and knowledge; it is the foundation of science, as science is of the advances of practice. There are three ways in which we have drawn from the exhausteless stores of science to supply our wants and enlarge our resources. We have made some progress by those brilliant though rare discoveries, the results it may be of accident or imagination, but which are linked to the useful and the known by the laws of science. Still more is due to the application of these laws to correct our judgment or performances, and to modify and improve our plans; but it is in its third remaining province that science is subservient to mankind at large; it explains, it generalises, it becomes our guide, and spreads among men that knowledge by which the power of the head is added to and skills that of the hand. Nothing is too simple or too common to be beneath its sphere; from the food we eat to the latest success of agricultural chemistry; from the shaping of a pen to the machine which prints 8000 copies in an hour, and from the excavation of a quarry to the winning of a deep mine; we find, on examination, that whatever we at present call perfection we owe to the labours of applied science.

As the mines have been the birthplace of our railways and of the locomotive, and the nurseries of the highest engineering talent, it may be supposed with truth that they present extraordinary difficulties, and, therefore, that under the pressure of necessity they force into activity the highest order of skill for their improvement. In fact, a Newcastle colliery presents the most remarkable illustration which this or any other country can boast of the successful application of science and experiment for successive ages to overcome the difficulties of practice. Many mining districts might be mentioned which are half a century behind the North of England in economical improvements, and as exhibiting the want of information amongst even the managers of mines in these districts, it may almost be taken as a rule that wherever minerals are abundant, near the surface, and easily accessible, there the most primitive, wasteful, and expensive methods are retained for extracting them. The entire cost of extracting and landing a ton of coal on the surface amounts to 3s. 6d., whether it be extracted in Staffordshire from the 10 yard seam, from the Newcastle seams of 4 to 6 feet in thickness, or from the thin and extremely difficult seams of Belgium, which average 26 in. only in thickness. In South Staffordshire the barriers of coal and the faults have been recklessly driven through, and large areas are consequently drowned out by water; besides this, the system of working is so wasteful that one-half the entire seam is destroyed and left underground. A seam which contains 40,000 tons of coal per superficial acre rarely yields 20,000; whereas, in the same district, collieries have been worked which yielded upwards of 30,000 tons. In other countries the lessee is compelled to bring out the whole of the coal, and this indeed is the ground and aim of the interference of foreign governments with mining education. The result of the Staffordshire system is a scarcity of minerals, now pressing severely on the manufacturers of that district, but it is gratifying to find that the recent labours of the Geological Survey are bringing to light the existence of beds of coal and ironstone, which will happily compensate for the dearth caused by practical ignorance and error. The introduction of permanent competition in the trade will tend, as it always does, to the employment of science, and the result may be safely predicted in the shape of larger profits to the proprietor, and increased safety to the workmen.

A large mine is a very complicated machine. To understand thoroughly its working involves a study of boring, sinking, pumping, winding, hauling, getting, and ventilation. The most popular and correct account is to be found in Longman's shilling series, entitled "Our Coal and our Coal-pits," and a similar work by the same author on the Cornish mines, which are the most important metallic mines, is issuing from the press. Some coal mines cover an area of two square miles, containing upwards of 160 miles of galleries, and 40 miles of underground railway. The shafts vary from 4 to 20 feet in diameter, and descend to depths of 600 yards in England, as at Monkwearmouth; and to 750 yards below the surface in Belgium. The mouth or eye of the shaft is covered by a lofty pyramid of timber, coal screens, engine-houses, and pumping and winding machinery. A direct-acting engine brings 2 tons of coal to the surface every minute, at a velocity of 30 miles per hour; whilst an underground engine, working an endless rope, draws trains of 50 wagons at a time from the extremity of working, two miles distant from the shaft, at the rate of 10 or 15 miles per hour. Upwards of 1000 men and 50 horses are employed in driving, exploring galleries, in maintaining the roof, the roads, the ventilation, and regular working of every part, in extracting the coal, and keeping the trains and engines fully supplied. The largest metallic mines require the labour of 1200 men, but they are seldom worked by the aid of horses or underground engines. They may contain 40 miles of horizontal galleries and 12 miles of shafts. They extend to depths, in Cornwall, of 750 yards beneath the surface, or below "grass," as it is termed.

We require the aid of mineralogy and geology to ascertain the nature and value of a mineral, its true position in the earth's crust, its probable abundance in particular strata, and whether it exists in threads, bunches, veins, or lodes. On each of these points depends the outlay of capital which it may be necessary or desirable to make. By the same means we ascertain the best position to sink our shafts, so as to avoid water and faults, and to reach the lowest part of the work, that the excavation may proceed upwards, and all water and minerals descend to the shaft. Without mechanics it is impossible to select the most economical means and arrangements of transport, either in the mine or in the shaft; and to ascertain the relative economy of engines, and other machines, as well as to place the machinery in such manner and positions as will obtain the greatest amount of useful work with the least expenditure of fuel. Pneumatics are essential to the knowledge of ventilation, on which the amount of manual labour, and the health and safety of the workmen, depend; whilst to chemistry chiefly belongs the analysis and preparation of the ore, and the choice of various processes for extracting metal of the most suitable quality. Can we hesitate to recommend a course of instruction in these sciences as eminently practical in its nature? Can we have too many facilities for distinguishing the different strata in their mineralogical relations, for ascertaining the direction and contents of the included veins, the nature of their produce, and the most efficient mode of exploring them? The drainage, whether by steam or by water-power, including the dimensions and placing of the engine, the economy of fuel, the preservation of the boilers, and the arrangement of the pitwork, to be accomplished with certainty, must be founded on sound mathematical and mechanical, and I may add, chemical principles. And when the strength of materials shall have been correctly calculated, and the sinking of shafts in the right places, the blasting, lighting, and ventilation of the mine, and the descent and ascent of the miners perfected, and the ores are at length "at grass," can we yet decide on the best mode of dressing them? Can no improvements be made in crushing, stamping, or calcining? Can we from practice, or from any analytical skill at hand, at once determine what ores are sufficiently rich in iron, manganese, silver, arsenic, cobalt, chrome, zinc, or sulphur, to warrant our pursuit or selection of them? The best mode of separating many of those substances, to say nothing of the smelting of our inferior copper ores, is still to be learned. Has not Pattison, by his scientific skill, added more than 20,000*l.* per annum to the value of the lead ores of England, and reduced the expense of extracting the silver by two-thirds? I assert, without fear of contradiction, that, however desirable the division of labour, and however conversant the mine agent may be with a few or more of his pursuits, circumstances constantly arise in which his experience alone will not guide him. I gladly admit that many of our engines and mining works, partly the result of the strong necessity, and the enormous expenditure and the scale in which inamorable trials were made, are models for imitation, and that we possess many men of genius and industry, who, after having laboriously groped their way for years, have given to their undertakings the touches of a master's hand. But in the interval how much has been lost to the country in the relinquishment of deep mines? and if we could analyse the long mental process, it would be seen how largely these men had imbibed from time to time the important truths developed by educated minds of deep thought. It must not be forgotten that this experience has often been obtained at a great expenditure of life, time, and money. If in the healing art the uneducated at length attain considerable proficiency, still the veil must be drawn over the death and suffering which marked his progress; so in mining the apprenticeship has often cost the lords the abandonment of valuable veins, and the adventurers sums varying from 100*l.* to 5000*l.*, and without the benefit to be derived from communicating generally the causes of failure or ultimate success.

How often do we find the expense of boring or sinking shafts incurred before the geological nature of the country is ascertained. Large sums have, in this way, been squandered in searching for coal. About 40 years ago, at Wincanton and Oxford, borings were commenced in the Oxford clay, and continued down to the oolite. The coal measures, if they exist beneath, being probably two-thirds of a mile deeper still. Borings, equally unsuccessful, were undertaken at Chard, in the lias of Somersetshire, without a previous examination of the 30 miles of country intervening between this and the nearest point of the Somersetshire coal field. In 1836 a sum of 30,000*l.* was expended in sinking at Kingsthorpe, near Northampton, with the expectation of finding coal. The shaft passed through the lias and the oolite, and reached the new red sandstone at a depth of 320 yards, being stopped by the influx of the saline waters of the latter series of beds. There is nothing within 20 miles of the spot to mark the dip or even the existence of carboniferous rocks, the depth of which below the surface ought not to be estimated at less than 700 yards. Several hundred yards in the coal strata only be penetrated without reaching a workable seam. Notwithstanding these practical objections, a company is now being formed to prosecute the enterprise. The oversight of the projectors in each of these cases has been in assuming dark clays, or ferruginous waters, or fragments of lignite, as indications of coal in rocks where science has shown that it does not exist; and in failing to examine, geologically, the dip and thickness of the overlying strata across the 20 or 30 miles which separate them from the nearest workings of coal. It were wise to commence at a short distance, and an ample field is open for such discovery in England, with far more reasonable prospects of success; as in Cheshire, Somersetshire, or on the lines of several hundred miles in extent where the coal-measures on the flanks of the central rise of England descend underneath, and are concealed by, the later unconformable rocks. In these situations the deep boring system of Kind and Degoussee, practised on the Continent might be applied with success, and bring into the market a vast amount of additional mineral property. Numerous other instances of fruitless adventures for coal are to be found in the millstone grits of Devon and Yorkshire, and in the Silurian shales of Carmarthen and Merioneth, where a superficial knowledge of geology would have shown that no coal could exist. Since the demonstration, by William Smith, in 1816 of the regular sequence of fossiliferous rocks, there have always been found persons still blindly incurring the heaviest penalties for the want of geological knowledge.

The first sinking of the Haswell Colliery was abandoned after an outlay of 60,000*l.*, in endeavouring to pass through a bed of quicksand. Geology, in acquainting the projectors with the nature of the rocks, might have warned them of this, and of the necessity of boring. The present shafts, sunk at a short distance from the former ones, avoided the difficulties of passing the quicksand. The Monkwearmouth shaft was nearly abandoned, in consequence of a difference of 100 yards in the calculation of the depth to be sunk; this was afterwards found to arise from no allowance having been made for the denudation of the coal rocks, which were overlaid by the magnesian limestone.

In the absence of an acquaintance with mineralogy, blende has been mistaken for lead ore, and in another instance large quantities were thrown away under the name of spar. An ironmaster supplied calamine, in lieu of iron ore, to his blast-furnaces, until he found out his mistake by its evaporating up the chimney. Many thousand pounds worth of the sulphide and black oxide of copper have been thrown into the sea on the shores of Cornwall. On the other hand, the experiments of Prof. Plattner, in Silesia, have resulted in the remunerative extraction of one part of gold in 228,000, and in Siberia, with low-priced labour, one part of gold in half a million parts of sand will pay for separation.

As an example of the successful application of science and perseverance, verifying the predictions of the philosopher, the discovery of gold in Australia is familiar to all. By the kindness of Mr. Hargreaves, the distinguished pioneer of the El Dorado, who has honoured me with his presence here this evening, I am able to exhibit some choice nuggets, characteristic of the various localities.

[*To be continued in next week's Mining Journal.*]

* Lecture delivered at the Educational Exhibition in St. Martin's Hall.

## INSTITUTION OF CIVIL ENGINEERS—PREMIUMS.

The Council of the Institution of Civil Engineers have awarded the following premiums:—

A Telford medal, to Nathaniel Beardmore, M. Inst. C.E., for his "Description of the Navigation and Drainage Works, recently executed on the Tidal portion of the River Lee."

A Telford medal, to Andrew Henderson, Assoc. Inst. C.E., for his paper "On the Speed and other properties of Ocean Steamers, and on the Measurement of Ships for Tonnage."

A Telford medal, to John Pigott Smith, Assoc. Inst. C.E., for his paper "On Macadamised Roads, and for Streets of Towns."

A Telford medal, to Alfred Charles Hobbs, Assoc. Inst. C.E., for his paper "On the Principles and Construction of Locks."

A Telford medal, to James Yates, M.A., F.R.S., &c., for his paper "On the means of attaining to Uniformity in European Measures, Weights, and Coins."

A Council Premium of Books, suitably bound and inscribed, to John Thornhill, Harrison, M. Inst. C.E., for his paper "On the Drainage of the District South of the Thames."

A Council Premium of Books, suitably bound and inscribed, to Daniel Kinnear Clark, Assoc. Inst. C.E., for his "Description of the Deep Sea Fishing Steamer, *Enterprise*, with Ruthven's Propellor."

A Council Premium of Books, suitably bound and inscribed, to James Simpson, Jun., for his paper "On the Prevention of Smoke, in Engine and other Furnaces."

A Council Premium of Books, suitably bound and inscribed, to Wm. Michael PenistON, M. Inst. C.E., for his paper "On the Casualties of Tunnelling, with examples."

A Council Premium of Books, suitably bound and inscribed, to David Chadwick, Assoc. Inst. C.E., for his paper "On Water Meters."

## SOCIETY OF ARTS—SUBJECTS FOR PREMIUMS.

An account of the methods adopted in working metalliferous mines.

An essay on ancient metallurgy.

An account of the various commercial copper ores, of the smelting process, and the methods by which the precious metals can be separated from copper.

The best essay on iron ore, and the manufacture of iron, as carried on in different districts and countries; especially contrasting the iron manufacture of England with that of America and the Continent of Europe. [supply.

An account of the manufacture of tin, and of recent discoveries of new sources of

An account of the modes by which wolfram can be separated from other ores; and on the uses of tungsten in the arts.

Any new application of tungsten in arts or manufactures. [these ores.

An account of menaccanite or iserine; and suggestions for obtaining titanium from

Any improvements in the process of smelting zinc ores. [slags.

Any improvement in the process of condensing the fumes in the smelting of lead

The best account of the production of sulphur and arsenic from the metalliferous ores of the United Kingdom, and statistics of the use and export of these substances.

The discovery in England, or the importation from any of the British possessions, of plumbago, or of some other substance which may be used in lieu thereof, equal in quality to that obtained from Cumberland.

An account of the methods now in use for separating silver from lead ores.

The best essay on the manufacture of steel as carried on in different districts and countries; especially contrasting the steel manufacture of England with that of America and the Continent of Europe.

An account of the best proportions for the production of the compound metal bronze, and the preparation of bronze washes.

The invention of a white metallic alloy, free from microscopic faults, which may be successfully applied to the arts; is hard enough for use in reflecting telescopes, and is not liable to be acted upon by the atmosphere.

The discovery or manufacture of a new smokeless fuel, which shall not occupy more space, or be of greater weight, than the fuel now in use; and shall be equal in the amount of heating power, without liability to injure metals in contact with it.

The most complete series of specimens of products obtained from coal, other than gas and coke, with an account of the processes employed in their manufacture, and the purposes to which they are or may be applied.

An account of the processes employed in obtaining different products, as parrafine, from shale, and the uses to which they may be applied.

The discovery in England of a bed or beds of pure white sand, suited to the manufacture of glass, and possessing similar properties to the French sands used in the same manufacture.

An account of the economic manufacture of colours by electricity.

An account of the best method of manufacturing artificial ultramarine, with suggestions for the extension of its production in this country.

The preparation of light colours to be used in enamelling or japanning slate or iron that will stand the action of heat from the fire without blistering or discoloration, and be sufficiently hard to resist scratches.

An account of recent improvements in, or applications to, the furnaces of steam-engine boilers, for the consumption or prevention of smoke, without increasing the expense of working.

An account of improvements in the furnaces of manufactories, especially in glass works, iron foundries, and the like, for the consumption or prevention of smoke.

The best essay on motive agents, either that have been introduced or proposed, and the peculiarities of the machinery for utilising the power obtained, with the results of experiments.

The best essay on electro-magnetic engines.

The adaptation of a new submerged propelling power in marine navigation, which shall possess all the advantages of the screw propeller, and be more directly acted upon by the moving power.

An account of the methods now in use for working malleable iron; and of any recent improvements in machinery employed for converting iron into bars, plates, &c.

The invention of a simple machine, by which plates of cold iron, say 7 feet by 3 feet, and from ⅛ to ¼ inch thick, may be readily cut either lengthwise or across, in equal parts, or in any other proportion that may be required.

An account of the successful manufacture of hydro-carbon gas, with the cost of its production.

An elastic material for tubing, suited to the conveyance of gas, and not liable to be affected by alterations in temperature, or to be acted upon by the gas itself.

The invention of an anemometer, for determining the direction of the wind, and its pressure in lbs. on the square foot; to be sold at a moderate price.

The production of castings in iron, equal in sharpness and delicacy of surface to those now imported from Berlin.

The cheapest and best smoke-consuming and fuel-economising open grate.

The best adjustment of a tubular chimney, with ventilator to the above, with the results of the trials of its working. [state.

The best means of turning to useful account slag, in a coarse, refined, or combined

A means of rendering the plaster used for casts less absorbent and more adhesive, so as to facilitate its use for repairing purposes. [coal.

The best means of utilising refuse ores, refuse coal, and impure approximations to

An account of the clays produced in these islands, and their uses, with especial reference to the manufacture of stone-ware pipes, for sewage, and other sanitary purposes.

THE CYLINDERS FOR THE "LEVIATHAN" STEAM-SHIP.—The casting of the fourth great cylinder for this gigantic steam-ship, now building for the Eastern Steam-Packet Company, took place at Mr. Scott Russell's Factory, Millwall, yesterday afternoon. Its three companions had been cast in the night time; but in this case the arrangements permitting the operation to take place by day, a considerable number of scientific persons, amongst whom we noticed Sir James E. Tennent and Capt. Owen, C.E., were attracted to the factory. Although the actual casting did not occupy two minutes, the previous preparations had exhausted three months of continuous labour in preparing the vast mouldings, and other preliminary details. The operation of casting was extremely simple. Three immense cauldrons of molten metal having been prepared, the whole were at a given signal set running into the mould, which is in fact a deep pit dug in the floor of the factory. As the fiery stream gushed forth, showers of sparks ascended to the roof; while the gas generated by the fusion filled the place with a sort of ghastly illumination. The operation was pronounced to be very successful; but until the vast mass of metal has cooled, it will not be known whether perfect freedom from flaw or blemish has been attained. The following are the dimensions of this enormous cylinder:—Diameter, 6 ft.; length 18 ft.; weight of metal put into the furnaces, 33 tons; nett weight of the cylinder, when finished, 28 tons. It is intended for the paddle engines—the screw machinery having been entrusted to Messrs. Bolton and Watt.

PROPOSED CONSTRUCTION OF STEAMERS.—It is currently rumoured in Manchester that one of the most eminent engineers of the town has made proposals to Government to construct for them a despatch boat, which shall run at the rate of 24 miles per hour. It is not known whether the offer has been accepted. The articles which have constantly appeared urging the desirability of bringing the power of science to bear as much as possible to aid us in the conduct of the war, have caused most of the eminent engineers of the town and neighbourhood to direct their attention to the possibility of building fast and other boats. The varied and extensive practical knowledge of these gentlemen has not, however, been directed to promote our warlike purposes alone; and it is said that a gentleman whose name has long stood high for the manufacture of machinery, purposes to build a huge steam-boat for the India service, which shall run out and home again in 63 days, carrying coals for the entire voyage there and back, and with many accommodations on board, which are at the present time unknown to ocean steamers.

## PORTLAND CEMENT—ITS ORIGIN AND USE.

In all architectural erections, from those which, if they do not constitute, at least evince a nation's greatness, to others of less pretense, cementing materials form a most important element; and among all those which have been submitted to public patronage, and the test of practical experience, perhaps none can be referred to with greater interest, or with more satisfaction as to the results, than the original Portland cement. This cement was originally invented by Mr. Joseph Aspdin, a builder, of Leeds, who having from motives of research analysed lava obtained from various volcanic districts, and sold as "tarras" and "pozzolano" cements, became impressed with the idea that he had discovered a material superior to all that had then been introduced. By dint of perseverance and enquiry, he discovered the composition of the strata, and how each element was affected by heat from volcanic action, as well as that spontaneously engendered. After much study and numerous experiments, he discovered a material which would set, and become harder than ordinary lime, and by constant application and unremitting exertions during a period of several years, he, in 1824, to insure its protection, took out a patent. He named it "Portland," in consequence of its close resemblance to the stone called by that name. It may be well here to remark, that although this material has been called *artificial hydraulic cement*, the term is only applicable to imitation Portland cements, or common blue lias lime, sold under the name, but bearing no comparison to the genuine article. After securing the patent, Mr. Aspdin erected a cement manufactory at Wakefield, and his son, Mr. William Aspdin, who is now the sole manufacturer, and was brought early into the business, by close application to the *rationale* of his father's process, has made much further improvement in the article.

The Portland cement had been manufactured seven or eight years before its setting properties and true value began to be appreciated; about which period it arrested the attention of Sir Mark Isambard Brunel, then constructing the Thames Tunnel, who, on experimenting, found it three times the strength of any other cement, and decided on employing it for his purposes, although nearly double the price of the best Roman cement. When the water broke into the Tunnel in 1828, a large quantity of this cement was thrown into the river, effectually closed the cavity, and enabled the contractors to pump out the water, and resume the work. It can be manufactured to set hard under water in one minute, or even less, or such result may be delayed for one or two hours, as most desirable.

Mr. Felix Austin, the artificial stone manufacturer, Regent's Park, having inadvertantly allowed some Portland cement to remain in a damp situation two years, it became hardened in the bags: he had it pulverised and mixed with water, in the usual manner, when, to his surprise, in a few days it set as hard as stone, and this may be considered its first introduction into London. Messrs. Wyatt and Parker, the principal Roman cement manufacturers, although the article came in competition with their own, were so convinced of its superiority, that they undertook the agency for its disposal. An increasing demand now took place, from engineers, architects, surveyors, contractors, and builders, and to such an extent that the Wakefield manufactory could not furnish the supply; another was, therefore, established at Rotherhithe; and on Messrs. Grissell and Peto undertaking the contract for the new houses of Parliament, a series of experiments were made under their own superintendence, which clearly showed its superiority. In some cases stock bricks were attached to a wall by their flat sides, and others to them, projecting horizontally, when heavy weights being added until the brick bar thus formed, up to as many as 40 bricks, gave way; in every instance the substance of the brick was torn out, the cemented portion remaining uninjured. In testing also for its adhesive power by the hydraulic press, equally satisfactory results took place. With various mixtures of sand and cement in different proportions, it stood a crushing force of from 18 to 45 tons before giving way; while a block of pure cement, 35 days old, stood a pressure of 141 tons, without even a flaw.

Mr. Aspdin suggested the propriety of adopting this cement in the construction of piers, breakwaters, and other hydraulic works, in lieu of stone, and masses of from 5 to 50 tons were constructed, merely of shingle, sand, and cement, which proved harder than any natural material; since which many important works have been completed in this manner, both by English and French engineers. Another important feature in this cement is its indestructibility. Unlike other cements, it neither decomposes by atmospheric or aqueous influences, nor generates mould or other vegetation. It requires no painting, and the longer it is exposed to the action of the weather the harder it becomes; for a demonstration of which fact reference can be made to houses stuccoed with this cement 30 years since, which are still hard as flint, and will strike fire with a blow from a trowel.

In common with all successful inventors and manufacturers, Mr. Aspdin has had much to contend with from unprincipled competitors and imitators. Workmen were enticed away, or bribed to spoil the material they mixed, and all kinds of false statements and injurious rumours circulated and published. But, *magnus est veritas et prevalabit*, Mr. Aspdin's samples in the Great Exhibition of 1851 were so superior as to gain the prize medal from a jury among whom were General Pasley, Professor Wapler of Vienna, and other eminent men; and the commercial importance of the extensive establishment of Messrs. Aspdin and Orr, at Gateshead on Tyne, and the business doing at their London premises, New Wharf, Abingdon-street, Westminster, fully prove the high estimation in which this material is now held by the engineering and architectural authorities.

## WEEKLY LIST OF NEW PATENTS.

### WEEKLY LIST OF PATENTS SEALED.

H. B. Barlow, Manchester—Improvements in manufacturing metal nuts, and in machinery for stamping, forging, and punching the same

W. Collier, Weston, Chester—Improvements in evaporating pans for concentrating solutions of certain acids, alkalies, and salts. [metal plates.

J. H. Johnson, Lincoln's Inn-fields—Improvements in polishing and flattening

D. Plisson, Paris—Improvements in chemical condensing apparatus.

J. Manley, Chacewater, Cornwall—Improvement in ventilation and in treating smoke, so as to prevent the ascent of the denser particles thereof into the atmosphere.

J. Anthony and W. T. Chafe, Devonport—Improvement in machinery for the manufacture of pipes and tubes from lead and other soft metals and alloys.

J. Worthington, Collieries, near Cardiff, and F. Allman, Adam-street, Adelphi—Improvements in boring, mining, and blasting, and in the apparatus connected therewith. [gines.

L. I. Molinos, and C. Pronnier, Paris—Improvements in locomotive steam-en-

C. Tetley, Thurlow-villas, Dulwich—Improvements in rotatory engines, to be worked by steam or water.

T. Waterhouse, Sheffield—Improvements in machinery for cutting files.

J. Beardmore, jun., Stowage, Deptford—Improvements in supplying air to furnaces.

C. Blunt, Sydenham, and J. J. W. Watson, Wandsworth—Improved description of artificial fuel.

J. Goucher, Worksop—Improvements in propelling ships and other vessels.

PULVERISING AND AMALGAMATING MACHINE.—A recently-patented apparatus for pulverising minerals, or triturating and amalgamating auriferous stone, was exhibited at work at Messrs. Dray and Co.'s machinery warehouses, Swan-lane, London-bridge, on Monday last. It consists of a strong open wheel, the periphery o which forms a semi-circular trough, revolving vertically; it has no axis, but is kept *in situ* by, and rotates between, a series of friction rollers outside the circumference, a central portion of which is cogged, gearing into a pinion on the shaft of which is the drum for carrying the belt conveying the motive-power. A solid heavy iron grinding wheel, about one-third the diameter of the circular trough, into which it accurately fits, is placed in bearings in such manner eccentrically with the outer one, that rotating in an opposite direction, all matters placed in the circular trough have a tendency to be carried upwards, but are met by the grinding surfaces thus formed, pulverised, and the waste debris is washed away over the lips of the trough into a receptacle below, from whence it is conveyed away in any convenient manner. The stone to be ground is first broken up to a moderate size, and is then fed to the machine through a funnel or hopper, which also supplies the water, mercury, or other substances necessary for the operations.

GAS FROM WOOD.—Some controversy has arisen in the United States between Mr. W. P. M'Connell and Lieut. Porter, U.S.N., as to who has the priority of invention and earliest patent right for the manufacture of gas from wood, for illuminating purposes. It turns out, however, that Mr. M'Connell's patent, of 1851, was for a peculiar manufacture of charcoal; Lieut. Porter's, of 1853, for obtaining gas from wood; and in the list for the week ending Sept. 26 is a claim of Mr. M'Connell for a plan of obtaining gas from wood by subjecting the products of destructive distillation to a high degree of heat, thereby obtaining the illuminating vapours. The attempt to render wood gas commercially valuable is an old affair, a patent having been taken out in France, in 1800, by Philip Lebon, an engineer; his object was general illumination, but his plan did not succeed, and he very soon abandoned the enterprise. Although wood be ever so plentiful gas cannot be produced from it so economically as from coal, resins, oils, or fats, as long as any of these substances can be obtained with ordinary facility.

SUBSTITUTE FOR WOOL; NEW FABRIC FROM FLAX.—We have had an opportunity of examining specimens of a patent fibre, prepared by the Patent Flax Company, whose advertisement appears in another column, so nearly resembling wool in appearance as to be capable, at first sight, of deceiving a practiced eye. It has already been extensively used in fabrics of various kinds, as a substitute for, and in admixture with, both wool and cotton, and can scarcely fail to become an exceedinly valuable article of commerce. We understand it is cheaper than cotton for many purposes, and not more than a third of the price of wool of corresponding quality. There cannot be a doubt of the policy of having as many different descriptions of material in use in our manufactures as possible, so that the failure or deficient supply of either of the most staple articles would be less destructive to manufacturing interests than has occasionally been experienced from such causes.

## Transactions on the Stock Exchange.

| *Shares.* | | *Paid.* | | *Last Prices.* | | *Business Done.* |
|---|---|---|---|---|---|---|
| 100000 | Agua Fria | 1 | ..... | 1⅛ — 1¼ | ..... | 1¼ |
| 30000 | Anglo-Australian Gold | 1 | ..... | — — | ..... | — |
| 100000 | Anglo-Californian | ⅛ | ..... | ¼ — ⅜ | ..... | — |
| 10000 | Australasian | 2 | ..... | — — | ..... | — |
| 20000 | Australian | 6 | ..... | 1 — 1⅛ | ..... | — |
| 60000 | Australian Cordillera | 1 | ..... | — — | ..... | — |
| 100000 | Australian Freehold | 1 | ..... | ⅛ — ⅜ | ..... | ¼ |
| 50000 | Ave Maria | 1 | ..... | — — | ..... | — |
| 210000 | Carsons Creek | ⅛ | ..... | — — | ..... | — |
| 100000 | Colonial Gold | 1 | ..... | ⅜ — ⅞ | ..... | — |
| 350000 | Copper Miners of England | Stock | ..... | 52 — 55 ex.d. | ..... | 55 |
| 8000 | Ditto, Preference, 7½ per cent. | 25 | ..... | 27 — 29 | ..... | — |
| 70000 | English and Australian Copper | 5 | ..... | 1¼ — 1⅜ | ..... | 1⅜ |
| 25000 | Fortuna | ¾ | ..... | 1⅛ — 1¼ | ..... | 1⅛ |
| 100000 | Great Nugget Vein | 1 | ..... | ⅛ — ¼ ex. in. | ..... | — |
| 72000 | Grand Duchy of Baden | 1 | ..... | ⅛ — ⅛ | ..... | ⅛ |
| 60000 | Liberty | 1 | ..... | ⅛ — ¼ | ..... | — |
| 10000 | Lusitanian (of Portugal) | 5 | ..... | 1⅛ — 1⅜ | ..... | — |
| 100000 | Mariquita | 1 | ..... | ⅜ — ⅝ | ..... | ⅛ |
| 2000 | Mexican and South American | 9 | ..... | 7 — 7¼ | ..... | — |
| 60000 | New Granada | 1 | ..... | ⅛ — ⅛ | ..... | ⅛ |
| 200000 | Nouveau Monde | 1 | ..... | ¼ — ¼ | ..... | ¼ |
| 10000 | Pontgibaud Silver-lead | 20 | ..... | 15 — 16 | ..... | — |
| 100000 | Port Phillip | 1 | ..... | ⅛ — ⅜ | ..... | — |
| 200000 | Quartz Rock | 1 | ..... | ⅛ — ⅛ | ..... | — |
| 50000 | South Australian | 1 | ..... | ⅞ — 1⅛ | ..... | — |
| 70000 | Waller | 1 | ..... | ⅛ — ¼ | ..... | ¼ |
| 100000 | West Mariposa | 1 | ..... | ⅛ — ⅜ | ..... | ¼ |

LONDON AND NORTH-WESTERN RAILWAY.—CONTRACTS FOR STORES FOR THE YEAR 1855.—The Directors are prepared to receive TENDERS for the SUPPLY of the undermentioned STORES, viz.:—

| No. of Contract. | | No. of Contract. | |
|---|---|---|---|
| 1. | Brass sheet and tubes for locomotives. | 19. | Lead, white and red. |
| 3. | Copper. | 19a. | Lead, sheet and pipe. |
| 4. | Canvas. | 20. | Iron, Yorkshire. |
| 5. | Carpet and rugs. | 20a. | Iron, Staffordshire. |
| 6. | Cloth. | 20b. | Iron, pig. |
| 7. | Axles. | 21. | Iron castings. |
| 9. | Crucibles. | 22. | Iron work. |
| 10. | Curled hair. | 23. | Wheels. |
| 11. | Carriage furniture, brass. | 24. | Oil, burning, &c. |
| 12. | Colours. | 25. | Oils (various), tallow, and turpentine. |
| 12a. | Drysaltery. | 26. | Oil cloth. |
| 13. | Coach trimmings. | 27. | Steel. |
| 14. | Cotton waste. | 28. | Steel springs and files. |
| 15. | Bags, rope, hemp, &c. | 29. | Tin blocks. |
| 16. | Glass, plate. | 30. | Tin sheet and spelter. |
| 16a. | Glass, various. | 31. | Varnishes. |
| 17. | Hardware and station stores. | 32. | Sundries. |
| 17a. | Brushes and pencils. | 34. | Hats. |
| 18. | Leather. | 35. | Caps. |
| 18a. | Leather, various. | | |

Specifications and forms of tender may be had on and after Monday, 23d October, on application, in writing, to the secretary, Euston Station, London.

Forms of tender for each contract are printed separately, and parties applying should state the particular contract or contracts for which they propose to tender.

Patterns may also be inspected on and after Monday, 23d October, from Ten till Four o'clock, at the Company's Pattern Room, Euston Station; and any further information required may be obtained on application to the heads of the several departments. Tenders may be sent in on or before Ten o'clock on Monday, the 6th of November. By order of the Directors, CHAS. E. STEWART, Sec.

Euston Station, Oct., 1854. 74

BELGIAN EASTERN JUNCTION RAILWAY COMPANY.—Notice of Call.—The directors of this company hereby give notice, that they have made a CALL of TEN SHILLINGS per share on the shares of this undertaking, payable on Wednesday, the 1st day of November next, and that the shareholders are required to pay the same on or before that day to Messrs. Masterman, Peters, and Co., bankers, Nicholas-lane, London; or to Messrs. G. Cassell and Co., bankers, Rue Fosse aux Loups, Brussels. 75

Interest at the rate of 5 per cent. per annum will be charged on all calls remaining unpaid after the 1st day of November; and if the call on any shares shall remain unpaid for 28 days from that day, the Board of Directors, in accordance with the provisions of the statutes to that effect, will have the power to declare such shares to be forfeited, and the holders to be henceforth deprived of all their rights in the company.

Discounts at the rate of 5 per cent. per annum will be allowed on all calls paid in advance of the above-named date. By order, W. G. BICKNELL, Sec.

Offices, 17, Buckingham-street, Adelphi, Sept. 11, 1854.

EUROPEAN AND NORTH AMERICAN RAILWAY.—A GENERAL MEETING of the shareholders of the European and North American Railway Company will be HELD at the Commercial Bank Building, in the City of St. John, New Brunswick, on Thursday, the 7th day of December, 1854, at Twelve o'clock noon, for the purpose of determining the times of holding the ordinary meetings of the company. By order of the Directors,

St. John, New Brunswick, Sept. 29, 1854. R. JARDINE, President.

THE WRYSGAN SLATE AND SLAB QUARRYING COMPANY, PORT MADOC, NORTH WALES.—Notice is hereby given, that the Board of Directors of the above company have this day made a CALL of TWO SHILLINGS AND SIXPENCE per share on the second issue of 10,000 shares in this company, payable to any of the undermentioned parties, on or before Tuesday, the 5th December, 1854; and also the undermentioned CALLS on the new shares (2s. 6d. paid), in accordance with the resolutions of the last half-yearly meeting, viz.:—

Two Shillings and Sixpence per share December 5th, 1854.
Two Shillings and Sixpence per share March 5th, 1855.
Two Shillings and Sixpence per share June 5th, 1855.
Two Shillings and Sixpence per share September 5th, 1855. 76

Payable at Messrs. Dimsdale, Drewett, Fowler, and Co., 50, Cornhill, London; Messrs. Duffield, Lofthouse, and Whitworth, Manchester; or to Mr. T. W. Wilkinson, company's offices.

By the "Rules and Regulations" of the company, all the shares on which any of the above calls may be unpaid after the above-mentioned dates, will be liable to immediate forfeiture. Interest at the rate of 5 per cent. per annum will be allowed on calls pre-paid, and charged on calls in arrear; but shares on which any call may be unpaid are liable to forfeiture as above. By order of the Board,

T. W. WILKINSON, Purser and Manager.

Offices, 26, Gresham-street, London, Oct. 24, 1854.

THE WELSH POTOSI LEAD AND COPPER MINING COMPANY, CARDIGANSHIRE.—Notice is hereby given, that the Board of Directors of the above company have this day made a CALL of ONE POUND TEN SHILLINGS per share on the £2 paid shares in this company, payable to any of the undermentioned parties, on or before Tuesday, December the 5th, 1854; and also the undermentioned CALLS on the new shares (10s. paid), in accordance with the resolutions of the last half-yearly meeting, viz.:—

Ten Shillings per share December 5th, 1854.
Ten Shillings per share March 5th, 1855.
Ten Shillings per share June 5th, 1855. 70

Payable at the Commercial Bank, Lothbury, London; Messrs. Duffield, Lofthouse, and Whitworth, Manchester; or to Mr. T. W. Wilkinson, company's offices.

By Rule XII of the "Rules and Regulations of the company, all the shares on which any of the above calls may be unpaid after the above-mentioned dates will be liable to immediate forfeiture. Interest at the rate of 5 per cent. per annum will be allowed on calls pre-paid, and charged on calls in arrear; but shares on which any call may be unpaid are liable to forfeiture as above. By order of the Board,

T. W. WILKINSON, Purser and Manager.

Offices, 26, Gresham-street, London, Oct. 24, 1854.

FOREIGN VINEYARD ASSOCIATION. Completely registered, capital £200,000, in 10,000 shares, for the supply of Wines to Private Families, Hotels, Messes, Clubs, &c.

CHAIRMAN—The Right Hon. Lord MUSKERRY, Carlton Club.
With six other directors from the principal Clubs of London. 79
MANAGER—T. W. STAPLETON, Esq., 51, King-street, Regent-street.

The wholesale scale of prices is adopted by this company. All wines will be strictly of the growths represented, and in every case pure. Private families can have same in large or small quantities, for prompt payment, after receipt and approval of supplies. Examples of advantage in prices:—The finest Epernay Champagne, hitherto charged £10 16s., now £6 9s. per case of 36 quarts; Moet and Chandon's first quality (direct from the firm), hitherto £12 12s., now £9 9s.; Claret, the finest Chateau R. Margaux, or Chateau Brane Cantenac, both under lease to the company, formely £12 12s., now £7 4s., Sherries, formerly 36s., now 28s. per dozen; finest Xeres imported, 56s., now 44s.; Ports in same ratio; finest Cognac, pale or brown, 26s. per gallon.

N.B.—Customers may also further benefit themselves by securing shares, certain to yield extraordinary dividends, with perfect safety of capital.

SCOTTISH PATENT FLAX COMPANY. Completely Registered under 7 and 8 Vic., 29th July, 1854,

DIRECTORS.

HARVEY BOWEN JONES, Esq., Montague-sq., and 22, Austinfriars—CHAIRMAN.
GEO. DREW, Esq., Kenley, near Croydon, and Bermondsey—DEPUTY CHAIRMAN.
JOHN FERGUS, Esq., M.P., Strathore, Fifeshire, N.B.
JAS. J. MACINTYRE, Esq., Onslow-crescent, Brompton.
WM. ALEX. THOMAS, Esq., 50, Threadneedle-street. 80
(With power to add to their number.)

AUDITORS—John Nelson, Esq., 1, Windham-place, Bryanstan-square; John Thomas, Esq., Threadneedle-street.
SOLICITORS—Messrs. Atkins and Andrew, White Hart-court, Lombard-street.
BANKERS—The London and Westminster Bank; and the Union Bank of Scotland.
OFFICES,—40, KING WILLIAM STREET, LONDON BRIDGE.

The business of this company is the preparation of flax and other vegetable fibrous materials for various purposes of manufacture, by means of improved processes, partly secured by Letters Patent, which are the exclusive property of the company.

The demand for flax in linen manufacture, as well as for the various recently invented preparations from flax and other vegetable fibres for manufacturing purposes, justifies the promoters of this company in their expectations of an extensive business, and of such profits as will ensure to the shareholders a liberal dividend upon their capital.

The company's works, in the county of Fife, are already in full operation, and it is intended, hereafter, to establish manufactories in other districts of Scotland, where the growth of flax is now, or likely to be, carried on.

The soil and climate of Scotland are especially calculated for the growth of the flax plant, and in those districts where establishments have been erected for the manufacture of flax from the straw the cultivation is rapidly extending.

As an investment, this company presents the certainty of an immediate return, manufacturing operations having actually commenced, under very favourable circumstances, which cannot fail to secure to the undertaking a high place in the public estimation.

As a means of promoting and extending the cultivation of flax, and of rendering the manufacturing interests of the country more independent of foreign supplies, it will doubtless continue to receive (as it has already, so far as it has been made known, secured) the countenance and support of gentlemen interested both in agriculture and manufactories.

The greater part of the shares (£10 each) have been allotted and fully paid-up—of those remaining to be disposed of, a portion are reserved for allotment to parties locally and otherwise interested in the cultivation of flax.

Applications for shares to be made in the following form, and addressed to the directors of the Scottish Patent Flax Company, 40, King William-st., London-bridge.

FORM OF APPLICATION FOR SHARES.

To the Directors of the Scottish Patent Flax Company.

GENTLEMEN,—I hereby request that you will allot me shares of £10 each, in the above-named company, and I hereby agree to accept such shares, or any less number that may be allotted to me, and to pay the deposit and calls thereon at the appointed times; and to execute the Deed of Settlement and all other necessary documents when required to do so. I am, Gentlemen, your Obedient Servant.

Name in full.....
Profession, trade, or occupation...
Residence in full.....
Place of business, if any .....

Name of referee .....
Address .....
Date .....

CLAY PURIFICATION OF GAS.—This process is APPROVED and ADOPTED by some of the most intelligent GAS ENGINEERS in the kingdom, and their opinions are fully borne out by the investigations of Dr. Letheby and other scientific authorities. It will, no doubt, be employed in nearly every well managed gas-works; and will lead to an enlarged consumption of gas in private houses, from which it is now excluded by a fear of its impurity.—Terms of license, &c., may be obtained of Messrs. HOLMES BROTHERS, Huddersfield, agents to the patentees. In use at the gas-works of Leeds, Preston, Huddersfield, Wakefield, West Riding County Gaol, &c. 81

IMPORTANT ANNOUNCEMENT OF AN EXTENSIVE SALE AT MILWR MINES, which are severally distant about one mile from Holywell, in the county of Flint.

MR. BELL has the satisfaction to announce, that he has been selected by the proprietors of the Milwr Mines to SUBMIT TO PUBLIC SALE, on the premises aforesaid, in order to a winding-up of that extensive concern, on Wednesday, the 8th, and Thursday, the 9th days of November next, commencing each day at One o'clock in the afternoon, the WHOLE of the very valuable MACHINERY, MINING MATERIALS, and other MISCELLANEOUS EFFECTS, consisting of 17 excellent horse whimsies, with pitheads and pulleys, complete; large quantity of whim chains and kibbles; an immense number of wrought-iron rails; weighing machine up to 8 tons; 30 fms. of 4 in. flange pipes, with bolts and rings; 20 fms. of 10, 12, and 14 in. flange pipes; 2 steam boilers, with hemispheric ends, each 30 ft. long, and 4 ft. diameter; pump cistern, 5 ft. long, 3½ ft. wide, and 5 ft. deep; balance-bob, carrying 10 tons for 9 ft. stroke; 16 in. plunger-pole, with stuffing-box and gland, complete; 18 in. ditto; a large quantity of red pine wood rods, 12 in. square; lots of other timber; 500 ft. of planks, 1 ft. wide, and 1½ in. thick; powerful 5-armed capstan and shears; 2 17 in. 9 ft. flange pumps; 100 fms. of 6 in. whim rope; triangle and crab winch; 12 railway wagons; 4 sets of large scale beams and stands; 2 sets of smaller scales; lot of weights; many thousand old bricks; an extensive assortment of smiths, miners', and other tools; and a great variety of other property appertaining to the said mines, too numerous to include in the limits of an advertisement, descriptive particulars of which, and the order of sale, will be given in catalogues, which are in the course of preparation, and may be had on and after Saturday, the 28th day of October inst., by applying at the Milwr Mines office, near Holywell; at the principal inns in Holywell, Flint, Mold, Denbigh, and St. Asaph; or at the auctioneer's office, 11, Panton-place, Holywell.—Dated Oct. 19, 1854. 82

VALUABLE MINING MATERIALS.

MR. PETER HAMBLY WILL SELL, BY PUBLIC AUCTION, at NORTH CARADON MINE, Linkinghorne, on Thursday, 2d November, at Noon, all the valuable MINING MATERIALS, comprising an excellent WATER-WHEEL, 18 ft. diam., 15 ft. breast, iron axle and rings, gudgeons, plummer blocks and brasses, wheel framing, and holding down bolts; shaft bob; 2 balance bobs; 2 angle bobs; 2¼ tons 2½ in. iron rods; pulleys and stands; 8 13 in. 9 ft. pumps; 1 12 in. 9 ft. working-barrel; 1 12 in. 9 ft. windbore; 1 12 in. doorpiece; 1 8 in. 9 ft. working-barrel; about 200 ft. new Norway timber; 300 ft. American balk; 1000 ft. of inch plank; quantity of old timber, sheds, beams, &c.; whim (oak axle); whim kibbles, winze kibbles; 2 water-barrels; picks; shovels; smiths' tools; vice; complete set of taps and plates, from ⅛ to 1½ in.; grinding-stone and frame; wheelbarrows; ladders; lifting jack; about 16 cwts. 11-16 chain; 3 cwts. ½ in. chain; ACCOUNT-HOUSE FURNITURE; old iron; old rope; and a great variety of articles adapted for mining and building purposes. 83

The auctioneer invites the attention of mine agents, builders, farmers, and others, to the above articles. The timber and plank are well seasoned, and of the best quality. The whole of the mining materials are new.

Refreshments on the table at Twelve, and the sale to commence precisely at One.

Dated Old Park, Oct. 22, 1854.

GARGRAVE, IN CRAVEN, NEAR SKIPTON, YORKSHIRE.
VERY IMPORTANT TO LANDED PROPRIETORS AND GENTLEMEN, BUILDERS, FARMERS, ENGINEERS, CONTRACTORS, BROKERS, AND OTHERS.

MR. WHEATLEY KIRK very respectfully announces, that he has been favoured with instructions from George Thornton, Esq. (who is leaving the neighbourhood for the south), to arrange, catalogue, and SELL, BY AUCTION, on Saturday and Monday, the 28th and 30th October inst., all the following valuable MISCELLANEOUS EFFECTS, &c., in, about, and upon his estate and premises, known as "The Grange," at Gargrave, near Skipton, in Craven, Yorkshire—viz., the residue of the valuable railway plant, recently used by Mr. Thornton in the construction of the North-Western Railway from Skipton to Lancaster, including capital LOCOMOTIVE-ENGINE (with copper tubes) and TENDER, which has recently undergone thorough repair; a most excellent 13 in. double geared lathe, with slide rest, and on cast-metal bed 20 ft. long (by Sheppard, Hill, and Spink); picks, hammers, shovels, platelayers' tools; barrows, carts, wagons, lurries, trucks, rails, cranes, blocks, chains, ropes, &c. Also all the truly valuable perfectly new and modern STOCK IN TRADE of the TILERY, including all kinds of sanitary tubes for draining, chimney pots, garden pots; several whole kilns of most excellent new bricks, both plain and of the patent perforated description, flooring tiles, &c.

The FARMING STOCK comprises all the valuable implements of husbandry; charming mare pony, a splendid leap, and has hunted two years; bay mare, rising five years old; black mare, six years old; splendid brown hunter (a mare), four years old; beautiful chesnut filly, one year old; bay cart horse, 16 hands high, strong and useful, seven years old; black cart mare, of high breed, powerful and willing, 15 hands high, and seven years old; two beautiful Newfoundland dogs, cage of white Brazilian doves; thorough-bred cow, in calf; 15 sheep, Scotch Leicestershire breed; two new carts, with patent axles; 14 tons of well-won hay, this season; cow, pigs, Cochin China and other fowls, ducks, &c.; large open family carriage, drag, carts, wagons, harness, sadlery, &c.

The HOUSEHOLD EFFECTS are of a genteel and modern character, and include the usual appointments for drawing, dining, and breakfast rooms, study, library, seven bedrooms, kitchen, and general culinary utensils, &c. 84

Order of sale: First day, Saturday, October 28th inst., the locomotive engine and tender, railway plant, and tilery stock.

Secondday, Monday, 30th: Farming stock, horses, cattle, implements of husbandry, household furniture, &c.

Catalogues may be had at "The Grange," at Gargrave, near Skipton, in Craven; and at the offices, Cross-street Chambers, Manchester, and 4, Kirkgate, Leeds; or by post on receipt of eight stamps.

YORKSHIRE.—IMPORTANT SALE.

DESIRABLE INVESTMENT IN A DELIGHTFUL DISTRICT.—VALUABLE PROPERTY, consisting of a GENTLEMAN'S RESIDENCE, FIRE BRICK and TILE MANUFACTORY, FARMING LANDS and COTTAGES, in the best part of CRAVEN. 85

The attention of the nobility and gentry is respectfully solicited to the under-mentioned sale, affording, as it does, the finest opportunity for any capitalist to invest his money in one of the most substantial and picturesque villas in Craven, Yorkshire. This delightful residence is situated on the banks of the River Aire; it commands an unbroken view of the most romantic and beautiful scenery, whilst its localities present attractions unrivalled by any estate in the kingdom. In its immediate neighbourhood may be enumerated the princely domain of the Duke of Devonshire, Bolton Abbey, Skipton, with its ancient castle; the meandering Aire, the lovely valley, and the towering rocks; in fact, this compact villa is graced by all that art and nature can command. Hunting, fishing, and shooting can here be indulged in at pleasure; whilst in a business point of view it possesses every advantage, inasmuch as the railway is close at hand, and affords every facility to the traveller, or for transit of goods of every description. With this imperfect introduction,

MR. WHEATLEY KIRK has the honour to announce that he will SELL this PROPERTY, BY AUCTION, in the order or lots as below, at the house of Mr. Thomas Middlebrook, the Swan Inn, in Gargrave, in the county of York, on Monday, the 30th day of October inst., at Six o'clock in the evening, subject to such conditions as will be then produced, viz.:—

LOT 1.—All that substantial and compact DWELLING HOUSE, now in the occupation of George Thornton, Esq., the owner (who is leaving the neighbourhood), situate at the outside of the town of Gargrave, on the banks of the River Aire, and within a quarter of a mile of the railway station on the North-Western portion of the Midland line, and surrounded by some of the most beautiful and romantic scenery in the far-famed Craven district. The house, which is in a thorough state of repair, contains dining, drawing, and breakfast rooms, with excellent kitchen, scullery, washhouse, seven bedrooms, and water-closet, and is fitted up with hot and cold water baths, and every convenience and comfort requisite for a gentleman's family. The grounds, which are tastefully laid out with fountains in gardens, shrubberies, parterres, carriage drives, croft, &c., comprise (including the site of the buildings) 1 A. 3 R. 4 P. statute measure, or thereabouts. The outbuildings consist of gardener's cottage, excellent stabling, coach-house, barn, piggeries, fowleries, &c. There is a most excellent wrought-iron water cistern attached to the premises erected by the present proprietor, containing 4000 gallons; also a sewer tank under the farm-yard, holding 9000 gallons. The above property is held under a lease for the residue of a term of 980 years, subject to a nominal rent of 5s. 2d. per annum; and the purchaser of this lot will be entitled to the pew in the parish church of Gargrave, which is within five minutes' walk of the house.

LOT 2.—A small PLOT of FREEHOLD LAND, near to the above, containing about 800 square yards, now used as a vegetable garden; the soil and situation rendering it one of the most productive in this country.

LOT 3.—All those FOUR CLOSES, FIELDS, or PARCELS of FREEHOLD LAND, situate in the township of Gargrave aforesaid, containing altogether 16 A. 1 R. 12 P. statute measure, or thereabouts. On this land there is a superabundant supply of the purest water; also a most extensive and valuable bed of fire-clay, within 9 inches of the surface, and which is now being worked up by steam into bricks, tiles, sanitary tubes, chimney pots, &c.; and with this lot will be sold all the capital tilery plant, utensils, 10 horse high-pressure steam-engine and boiler, clay-mills and machinery, erections, sheds, kilns, &c., now standing thereon, and which are in excellent condition, and on the newest and most approved principle.

LOT 4.—All those SIX RECENTLY ERECTED and tastefully built COTTAGES, called Western Cottages, situate at the outskirts of Gargrave aforesaid, together with the land now used as gardens, attached to or in front of each, and containing, with the site of the said dwellings, two acres or thereabouts.

The house and grounds forming Lot 1 may be viewed any day between the hours of Twelve and four, by applying to Mr. PETER M'MILLAN, on the premises, who will also show the other lots; and for any further information, application may be made to GEORGE THORNTON, Esq., on the premises; or to the auctioneer, Cross-street Chambers, Cross-street, Manchester; or No. 4, Kirkgate, Leeds; or to Messrs. MYERS and BIRKBECK, solicitors, Town Hall Chambers, Essex-street, Manchester.

POSTPONEMENT OF SALE OF THE VICTORIA FOUNDRY PLANT, DUBLIN.—The SALE, BY AUCTION, previously advertised to take place on the premises of Messrs. J. and R. Mallett, Victoria Foundry, Dublin, on the 2d of November, is hereby POSTPONED to the 6th of November, on which latter day it will commence, and continue for 14 days at least. 86

WHEATLEY KIRK, Auctioneer, Cross-street Chambers, Manchester.

TO BE SOLD, BY AUCTION, early in November, if not previously disposed of by private contract, the MINING SETT of NEW EAST CROWNDALE, near Tavistock, together with a 30 inch cylinder BEAM ENGINE; a 20 feet water-wheel, 4 feet breast; 60 fms. of 11 inch pumps; capstan, shears, and all other machinery and materials now on the mine; the whole in perfect condition.—Catalogues, when ready, and further particulars, if required, may be obtained by application to Capt. JAMES CARPENTER, Tavistock; or Mr. EATON, 2, Walbrook-buildings, London. 87

TO COAL AND IRONMASTERS.—TO BE LET, on royalty, at Longton, Staffordshire Potteries, a valuable and extensive COLLIERY, known as the OLD MOSSFIELD COLLIERY, containing the Mossfield Coal, Yard Coal, Birches Coal, Ten Feet Coal, Hard Mine Coal, Banbury Coal, and Cockshead Coal. There are requisite SHAFTS, WINDING and PUMPING ENGINE, with BUILDINGS, MACHINE, &c., on the premises. The locality of this colliery is the best in the district, being within 300 yards of the town of Longton, at which place the consumption of coal is very great. The North Staffordshire Railway almost adjoins the estate. The excellent quality of these coals is well known in the district. The engines, pit shafts, pit frames, ropes, chains, &c., to be taken at a valuation.—For particulars, &c., apply to Mr. R. G. COKE, Chesterfield, Derbyshire; or to Mr. G. H. BOND, Tiled House, near Dudley, Staffordshire. 88

VALUABLE CANNEL AND COAL MINES, IN THE GREAT WIGAN COAL FIELD.—TO BE LET, the CANNEL and COAL MINES under the CROOKE HALL ESTATE and LAND ADJOINING, in the township of Shevington, parish of Standish, county of Lancaster, being upwards of 300 statute acres of land. The mines now advertised are as follows:—

| | |
|---|---|
| The Wigan Five-ft. Mine, about 3 ft. thick. | The King Coal, about 3 ft. 6 in. thick. |
| The Wigan Four-ft. Mine, about 4 ft. thick. | The Raven Mine, about 3 ft. thick. |
| The Nine-feet Mine, about 6 ft. thick. | The Yard Mine, about 3 ft. thick. |
| The Cannel Mine, about 2 ft. 4 in. thick. | The Arley Mine, about 5 ft. 6 in. thick. |

The Cannel and King Coal Mines are now in the course of being worked in the adjoining estate, and are supposed to be laid dry. The Wigan Five and Four-feet, and the Nine-feet Mines, are also worked in the same estate. The Cannel is about 300 yards from the surface, and the first mines about 170 yards deep.

The mines are most advantageously situate, as the land is intersected by the Leeds and Liverpool Canal, on the banks of which the shafts would be sunk. There is also a communication with the London and North-Western Railway now in course of construction. The land is situate about three miles from Wigan, from which there is a good road.—Any further information may be had, and plans of the estate seen, on application to Messrs. WOODCOCK, PART, and SCOTT, solicitors, Wigan.

Wigan, Oct., 1854. 89

COPPER MINE.—FOR SALE, a very promising SETT, situated near Calstock, CORNWALL, on which about £1000 has already been expended, and five valuable copper lodes discovered. The present proprietors offer the above for sale free from all liabilities, with lease for 20 years, at 1-15th dues. An adit has been driven about 40 fms., and tramroad laid down for 70 fms.; and a substantial smiths' shop and account-house is erected. There is also a complete map of the mine by Davey.—Any offer addressed to Mr. W. H. BAUMBY, sharebroker, No. 1, Bridge-street, Bath, will be attended to, and an order given for the captain to show the sett. 90

LEAD MINES.—TO BE LET, ON LEASE, for such a period of years as may be agreed on, the WHOLE VEINS of LEAD in the lands of Glendourain, situated in the parish of Crawford John, and county of Lanark. These lands are in the immediate neighbourhood of the well-known mining district of Leadhills, and are within six miles of the Abington Station of the Caledonian Railway, to which there is easy access by good roads. 91

Partial trials have already been made, the result of which affords good reason to believe that valuable veins of lead will be found at a comparatively trifling outlay of money. To individuals, or to persons forming a company for working the mines, and for which only a small capital will be required, liberal encouragement will be offered.—For further information, application may be made to Mr. ALEX. ROSE, mineralogist, 1, Drummond-street, Edinburgh; to Mr. JAMES HUNTER, at Abington, who will point out the boundaries; and to Mr. RONALD, S.S.C., Edinburgh, who is empowered to arrange the terms of a lease.—Edinburgh, August 25, 1854.

IMPORTANT TO IRONMASTERS.—A LARGE QUANTITY of IRON ORE on the MULGRAVE ESTATE, near Whitby, is now READY TO BE LET. This immense seam runs for about five miles along the cliffs facing the German Ocean, is from 8 to 15 feet in thickness, and is allowed by competent authority to be much the richest ironstone yet discovered in Cleveland. It is within 16 miles (by sea) of Hartlepool, and 20 of Middlesborough; the above locality is now celebrated for the manufacture of iron. The seam will be divided so as to suit companies; and further information may be obtained on application to Mr. KERR, Lythe Hall office, near Whitby.—Lythe Hall, May 29, 1854. 92

CONTRACT FOR COALS.—CONSULATE GENERAL OF FRANCE.—Notice is hereby given, that the Administration of the General Post-office of France will, on the 3d of November next, be ready to RECEIVE SEALED TENDERS for the SUPPLY of 2,100,000 kilog. COALS, to be delivered at Calais.—The schedule of particulars may be seen daily between Twelve and Four o'clock at the Consulate General, 36, King William-street, City. 93

TO ENGINE MAKERS —PERSONS willing to CONTRACT with the GLOUCESTER and BERKELEY CANAL COMPANY for the SUPPLY and ERECTION of a PUMPING-ENGINE, at Gloucester, to pump water into the Canal, are requested to SEND in TENDERS for that purpose, to the committee of management, on Tuesday, the 5th day of December, 1854.

The pumps and machinery to be of the best description in design, material, and execution; but all bright work not absolutely necessary is to be dispensed with.

The duty required is 2240 cubic ft. per minute, raised not exceeding 22 ft. in height; and the quantity of fuel to be consumed for amount of work done at the maximum lift must be guaranteed.

The tenders must state the price for delivery and erection at Gloucester, exclusive of the brickwork or masonry, which will be done by the Canal Company; but the tenders must be accompanied by drawings of the engine, pumps, and boilers, with full specifications of what is proposed, as well as working drawings and specifications of all brickwork or masonry required for supporting the same. A new chimney stack is not required.

The engine must be erected and put to work by the 1st day of July, 1855. 94

The committee do not pledge themselves to accept the lowest tender.

Any further information may be obtained at this office.

By order of the Committee, W. B. CLEGRAM, Clerk to the Company.

Canal Office, Gloucester, Oct. 25, 1854.

TO ENGINEERS, SURVEYORS, &c.—The Survey of the portion of the parish of Wallasey, to which the Public Health Act, 1848, is applied, being now ready, the LOCAL BOARD are desirous of OBTAINING PLANS, SPECIFICATIONS, and ESTIMATES, of a SYSTEM of SEWERAGE, for effectually draining that district. 95

Premiums of £100 and £50 respectively will be given to the authors of the two plans most approved of; such plans to contain all information regarding materials, &c., necessary to their being practically worked out, and to include, as far as practicable, means for preserving the sewerage matter for agricultural or other purposes.

The survey of the parish will lie at the temporary offices of the board, Queen's Arms, Liscard, between the hours of Nine and Eleven A.M., from Wednesday, the 18th inst., till Saturday, the 18th of November next, where any additional information may be obtained.

Four plans, at least, from as many different competitors, must be sent in, otherwise the premiums will not be awarded.

The plans, specifications, &c., signed with a motto or device, and accompanied by a letter marked with a similar motto or device, enclosing the name and address of the author, to be sent to the office of Mr. HASSALL, solicitor, No. 3, Old Churchyard, Liverpool, on or before the 31st day of December next.—Dated Oct. 12, 1854.

TO ENGINEERS, ARCHITECTS, AND BUILDERS.—The VIEILLE MONTAGNE ZINC MINING AND MANUFACTURING COMPANY are now prepared to UNDERTAKE CONTRACTS, through their agents, for ZINC ROOFING of all descriptions; together with, when required, all the NECESSARY TIMBER or IRON FRAMEWORK, in which a great saving is effected by the lightness of the metal. It possesses all the advantages of galvanised iron, and is far more durable and cheaper, especially for large spans. 96

The long duration of these roofs without repair, their neat appearance, and the economy of materials employed, as well as of area covered, render them most advantageous for dwelling-houses.

Many roofs covered with zinc, especially on the Continent, have remained since the first introduction of this metal to the present time without having required, or appearing likely to require, any repairs.

Certificates in proof of this, from the French Government and other authentic sources, can be seen at the company's offices, where all information, estimates, drawings, or prices, together with every assistance in laying on or otherwise, may be obtained on application to the company's surveyor, at No. 12, Manchester-buildings, Westminster.

STEAM-ENGINE.—FOR SALE, in consequence of the proprietors requiring one of great power, a NEW SINGLE-ACTING CONDENSING PUMPING ENGINE, 52 in. cylinder, 8 ft. stroke, with extra strong beam. Parties requiring an engine of this description will find this, in every respect, worthy attention. The engine has been completed under the inspection of the proprietor's engineer, and the above reason is the sole cause for its being disposed of.—For further particulars, apply to the Secretary of the Pembrokeshire Iron and Anthracite Steam Coal Company, 13, Gresham-street, London; or to the makers, Messrs. GREEN and SONS, Wakefield, Yorkshire. 97

GUEDALLA TESTIMONIAL.—A SUBSCRIPTION is NOW OPENED, for the purpose of presenting this gentleman with a PIECE OF PLATE, as a testimonial for his unremitting exertions, at great personal expense, in exposing the dishonest and unjustifiable proceedings in gold mining companies, by which many were prevented being defrauded. Donations to be addressed to the "Treasurer," 17, King's Arms-yard, London.

Subscriptions received to 26th October:—

| | | | |
|---|---|---|---|
| Charles Manby, Esq., 26, Montpellier-crescent, Brighton | £10 | 0 | 0 |
| A Poor Half-pay Officer, per ditto | 0 | 10 | 0 |
| M. A. Goldsmid, Esq., 26, Rue Basse du Rempart, Paris | 5 | 0 | 0 |
| Frederick Grant, Esq., Manchester | 2 | 2 | 0 |
| John Morison, Esq., 23, Cavendish-road West, London | 2 | 2 | 0 |
| Henry Gibson, Esq., 17, Gracechurch-street | 1 | 1 | 0 |
| G. J. Soper, Esq., 158, Strand | 1 | 1 | 0 |

98

A New Edition, in 8vo., price 10s. 6d.,

HISTORY OF THE IRON TRADE, FROM THE EARLIEST RECORDS TO THE PRESENT PERIOD. By HARRY SCRIVENOR, Liverpool, Author of the *Railways of the United Kingdom Statistically Considered.*

London: Longman, Brown, Green, and Longmans. 99

A new Edition, in 2 vols. 8vo. with Six Maps, price 63s.

M'CULLOCH'S DICTIONARY, GEOGRAPHICAL, STATISTICAL, AND HISTORICAL, OF THE WORLD. 100

London: Longman, Brown, Green, and Longmans.

Just published, price Five Shillings,

VERTICAL SECTION, showing the AVERAGE POSITIONS of the PRINCIPAL SEAMS OF COAL AND IRONSTONE IN LANARKSHIRE, with probable corresponding positions in the counties of Ayr, Dumbarton, Edinburgh, Fife, Haddington, Linlithgow, Perth, Renfrew, Stirling, &c. By RALPH MOORE, Mining Engineer, Glasgow.—Glasgow: Morrison Kyle, 108, Queen-street. 102

POST OFFICE LONDON DIRECTORY WILL, as usual, BE PUBLISHED the FIRST WEEK in NOVEMBER.

Kelly and Co., 19, 20, and 21, Old Boswell-court, Temple Bar. 103

BLUNDERS.—WATKINS'S DIRECTORY FOR 1855.—In eight pages imperial octavo, a Review of the March edition of *Watkins's London Directory* for 1854, exposing a large number of blunders, by far the greater part of which appeared in the first edition of *Watkins's Directory*, published in December, 1851, and which have since been reprinted with every subsequent edition of the book. *Watkins's Directory* for 1855 has been already published, and all the IDENTICAL BLUNDERS exposed in the Review have been AGAIN REPRINTED into it. 104

Persons who have purchased the work should, without delay, obtain the Review which may be had here gratis, or will be forwarded on receipt of one postage stamp.

Kelly and Co., 19, 20, and 21, Old Boswell-court, Temple Bar, London.

OVERLAND ROUTE.—STEAM TO INDIA AND CHINA, &c., VIA EGYPT.—The PENINSULAR AND ORIENTAL STEAM NAVIGATION COMPANY BOOK PASSENGERS and RECEIVE GOODS and PARCELS for the MEDITERRANEAN, INDIA, and CHINA, by their mail packets leaving Southampton on the 4th and 20th of every month; and for AUSTRALIA by those of the 4th of November, and 4th of every alternate month thereafter.
For further particulars, apply at the company's offices, 122, Leadenhall-street, London; and Oriental-place, Southampton. 105

EMIGRATION.—AUSTRALIA AND AMERICA.—PASSENGERS and LUGGAGE LANDED FREE at ADELAIDE, MELBOURNE, SYDNEY, £16 to £30; Children Half-price; in enclosed cabins, per A 1 ships. NEW YORK, BOSTON, QUEBEC, £4 to £20. Every facility afforded on receiving satisfactory security.—Apply to WM. BARNETT and Co, 25, Philpot-lane, merchants, colonial, shipping, and general agents. 106

PHYSICS.—PROF. STOKES will COMMENCE a COURSE of THIRTY-SIX LECTURES on PHYSICS on FRIDAY NEXT, the 3d of November, at Two o'clock, at the MUSEUM OF PRACTICAL GEOLOGY, Jermyn-street; to be continued at the same hour on each succeeding Monday and Friday. Fee for the course, £3. TRENHAM REEKS, Registrar. 107

COLLEGE OF INDUSTRIAL SCIENCE, NEVILLE HALL, NEWCASTLE-ON-TYNE.
ASSAY OFFICE and LABORATORY under the DIRECTION of Dr. THOMAS RICHARDSON and Mr. E. J. G. BLOWELL, assisted by Mr. W. CROWDER.
The LABORATORIES are OPEN DAILY, from 9 A.M. to 5 P.M., where instruction is given in every branch of Assaying, Analytical Chemistry, and Chemical Research. Fee for Twelve Months, £32 10s. 108
ANALYSES and ASSAYS of NATURAL and MANUFACTURING PRODUCTS, such as Ores, Soils, Waters, Gases, Metals, Coals, Artificial Manures, Alkalies, &c., are made on moderate terms, and the commercial value estimated when required.
INVESTIGATIONS and EXPERIMENTS for IMPROVING MANUFACTURING PROCESSES carried on in conjunction with the proprietors.
A COURSE of ONE HUNDRED LECTURES on GENERAL CHEMISTRY delivered during the Winter Session at the College of Medicine in connection with the University of Durham, to which the laboratory students have free admission.

NORTHAMPTONSHIRE GREAT CENTRAL COAL MINING COMPANY.
Capital £21,500, in 21,500 parts, or shares, of £1 each, paid up, and no further liability.
To be conducted on the "COST-BOOK PRINCIPLE."
Held under lease for 40 years, from the 29th day of September, 1854, at a royalty of 1s. per ton.
COMMITTEE OF MANAGEMENT.
Mr. JOSEPH ADNITT, merchant, Bridge-street, Northampton.
WILLIAM BUTCHER, Esq., Cotton End, Hardingstone, Northampton. 109
Mr. JOHN DULEY, ironfounder, St. John's-street, Northampton.
Mr. SPENCER JONES, shoe manufacturer, Drapery, Northampton.
Mr. JOHN LILLYMAN, brush manufacturer, Gold-street, Northampton.
Mr. ROBERT MILLS, clothier, Bridge-street, Northampton.
WM. PORTER, Esq., St. Andrew's-terrace, one of the aldermen of Northampton.
BANKERS—The Northamptonshire Banking Company, Northampton.
SECRETARIES—Mr. N. W. Freeman, Market-square, Northampton; Mr. John Jones, Union-street, Northampton.
SOLICITORS—Messrs. Hulme and Foyster, Manchester.
OFFICES,—MARKET SQUARE, NORTHAMPTON.

PROSPECTUS.

The period having arrived when a combination of fortuitous and most advantageous circumstances, both of a local and general nature, have greatly enhanced the importance so long attached to the discovery of coal in the more southern portions of the kingdom, it has been resolved to form a powerful company for the purpose of resuming operations at the Kingsthorpe shaft, which several years ago, though then presenting such high promise of a successful issue, were obliged to be suspended for the want of adequate capital to carry on the works.
The property on which this mine is situated consists of 105 acres, lying in the parish of Kingsthorpe, near the turnpike-road leading to the populous town of Northampton, about two miles distant. The works to which it is now desired to invite the particular attention of the general public were commenced (for the discovery of coal) on the northern verge of the middle oolite strata, and were continued to a depth of 160 fathoms. In the course of this sinking, a number of facts of the most encouraging character were developed, and which have far exceeded the most sanguine expectations of persons conversant with the geology of the neighbourhood.
The formations of the lower oolite, lias and red marl, which geologically intervene between the site of these works and the great coal formation, were found to be very much thinner than their general estimated thickness, and at the period of the suspension of the works there was the strongest evidence for believing that the miners had actually penetrated some distance into the coal series, especially as a conglomerate rock, 6 feet thick (exactly similar to the one existing in the same geological situation, and resting on the coal measures in Staffordshire and Leicestershire), was found at the base of the red marl formation, and in the lower beds of which a strong brine spring was discovered.
It is almost unnecessary to observe, that independently of the highly encouraging prospects now so palpably exhibited of the discovery of coal in this part of England, it is a consideration of the greatest consequence to landed proprietors, and to the local interests generally, and when viewed in connection with the recent important discoveries of inexhaustible iron ore beds (thousands of tons of which are weekly sent out of the county to be smelted) in this immediate neighbourhood, the Great Central Coal Mining Project, may be truly said to assume an aspect of great national importance. In order to carry out this pregnant enterprise effectually, it has been deemed advisable to raise a sufficient capital in the outset to erect a powerful steam-engine, and to meet all contingencies which may possibly arise in the progress of a work of this character; and it is confidently expected—from the various and very inviting circumstances shown to warrant so strong a belief in a successful issue of the undertaking, to say nothing of the present high price of coal—that the shares will be rapidly taken up, and that the operations will again shortly be in a state of full and effectual progression.
The projectors propose to raise a capital of £21,500, in twenty-one thousand five hundred parts or shares of £1 each, the sum provided being much larger than it is considered will be requisite to meet every contingency.
It has been made a fundamental principle in the rules of the company that the mine shall never be in debt, and that every account shall be paid monthly, and that no shareholder shall be liable for more than £1 per share.
Applications for prospectuses and for shares may be addressed to Mr. N. W. FREEMAN, shrebroker, Market-square, Northampton; Mr. THOMAS LEWIS, sharebroker, St. George's Chambers, High-street, Birmingham; Mr. LANE, mining agent, 33, Threadneedle-street, London; Mr. EARL LANGSTON, stock and sharebroker, Queen's Chambers, Manchester; Mr. JOHN HARRISON, mining and sharebroker, Liverpool; Messrs. CROKER and Co., brokers, Plymouth; Mr. W. H. BRUMMY, broker, Bridge-street, Bath; to the secretaries, the solicitors, or to any gentleman of the committee.

FORM OF APPLICATION FOR SHARES.
To the Committee of Management of the Northamptonshire Great Central Coal Mining Company.
I request you will allot me shares in the above company, of £1 each, and I hereby engage to take the same, or any less number that may be allotted me, and I undertake to pay the bankers of the company £1 on each allotted share when required to do so.
Name in full.....
Reference..... Address.....
Date..... Occupation.....
* This quantity may be extended to 300 acres, or more, if required by the company.

NORTHAMPTONSHIRE GREAT CENTRAL COAL MINING COMPANY.
REPORT OF MR. ROBERT BEAUMONT, OF LLANDAFF. 110
*Northampton, Aug. 29, 1854.*—In consequence of an application on behalf of the Northamptonshire Great Central Coal Mining Company, I have examined the property at Kingsthorpe, with a view to ascertain the quality of the minerals, with their approximation to the coal fields in the western districts. At Kingsthorpe, two pits or shafts have been sunk several years ago, to the depth of about 320 yards or 160 fms.; the journal given of the several strata passed through in the course of sinking these pits, and the appearance of the metals as seen on the surface, indicate in strong terms that they belong to the series of red and white marl stone, or lower range of oolite strata. They appear also to have sunk through the red and variegated marls and new red sandstone, and thereby have approached the red conglomerate, magnesian limestone, and conglomerate, which are embedded next to the coal measures. Finding this to be the case, I have examined the strata in Warwickshire, where the easternmost collieries have been opened, and I find there nearly the same range of strata; as also at Coventry the same rock is found. This stone completely resembles the Bath stone, both in texture, colour, and position, under which coals are now being worked, and where a few years ago it was considered coal did not exist; but by perseverance to a considerable depth, the coal was discovered, and I believe I may add, the success of this undertaking was accomplished mainly through my own recommendation to persevere in the execution of their trials. I find the course of these measures range from Coventry towards Rugby; there the lias limestone is found in good quality, embedded in the marl, which is made into very fine bricks and pipes, and the limestone ranges along for several miles. Now, as the limestone marls are also found at Kingsthorpe, it shows a very strong analogy that the coal measures will be found there also, by proceeding to the proper depth. There is another very powerful instigation for going into and persevering in this discovery, which is that one-half of the work has already been accomplished, by having those two pits, which are already sunk down 160 fms. In Warwickshire the pits are fully this depth, and new works are being opened to a considerable additional depth, and one colliery has been working coal to the lower or deep side of the pit, and they find the quality of the coal there to improve. There have been dislocations met with in the strata, the effect of which is to raise the different minerals 100 yards perpendicular nearer to the surface, in an easterly direction; this is so far favourable; and there is no doubt that others of a similar nature and effect will occur. These occurrences of nature are found to be of the very greatest utility, by preserving the coal and other strata within a reasonable distance from the surface of the earth, for without these the several strata would descend to a depth beyond our reach. In consequence of having met with a salt spring at Kingsthorpe, in the bottom of the shaft, with the limestone on the surface, it may not be out of place to mention that in the Northumberland district they have also got the limestone at the surface, and very strong saline springs below, from which large quantities of salt are made, and some of these coal pits are 300 fms. in depth. A pumping-engine of about 100-horse power, and a winding-engine of about 50-horse power, will be required. The late discovery of extensive iron ore in this district fully warrant a searching attempt for the discovery of coal, as there will be a great increase in the population; but had iron ore not been discovered, there is sufficient market to warrant a large expenditure in the production of coal in the immediate district. In the event of coal being met with, the winding-engine proposed will be found equal to raise at least 300 tons of coal per day; this may be considered equal to 75,000 tons per annum.
The amount of sales and charges, to be taken in a moderate way, I should state as under:—

| | | | |
|---|---|---|---|
| Amount of sales of 75,000 tons at 12s. is | £45,000 | 0 | 0 |
| Ditto, charges on obtaining ditto, at 7s. is | 26,250 | 0 | 0 |
| Profit—Balance | £18,750 | 0 | 0 |

Should you require any further information or assistance, it will be given with pleasure by your obedient servant, ROBERT BEAUMONT, Llandaff, Cardiff.

RAILWAY WAGONS.—WM. A. ADAMS, MIDLAND WORKS, BIRMINGHAM.
BROAD AND NARROW GUAGE COAL AND IRONSTONE WAGONS, *IN STOCK—FOR SALE OR HIRE.* 111

GRIFFIN AND HENSON, RAILWAY CARRIAGE AND WAGON BUILDERS, SOHO, BIRMINGHAM. 112
MANUFACTURERS of EVERY DESCRIPTION of IRONWORK for RAILWAY CARRIAGES and WAGONS.

RAILWAY WHEEL AND AXLE WORKS.—GEORGE WORSDELL AND CO., WARRINGTON, MANUFACTURERS of EVERY DESCRIPTION of HAMMERED IRON, TYRES, AXLES, &c. 113

THOS. SPENCER, VULCAN IRONWORKS, WEST BROMWICH, STAFFORDSHIRE, MANUFACTURER of RAILWAY WHEELS and AXLES, SCRAP TYRES and AXLES, ALL KINDS of HAMMERED IRON for MARINE and other ENGINES, SHAFTS, and HEAVY IRONWORK.—SOLE MAKER of CAMBER'S PATENT WROUGHT-IRON RAILWAY WHEELS. 114

NORRIS'S PATENT RAILWAY CHAIR COMPANY beg to draw the attention of railway companies and engineers to NORRIS'S PATENT RAILWAY JOINT CHAIRS. This patent has received the unqualified approbation of some of the most eminent engineers of the day, as the most effective, economical, and perfect joint in use at the present time. The simplicity of its construction is such as will allow of its application to any line of railway, without causing the slightest hinderance to the ordinary traffic during the time that it is being laid down.
The saving in the preservation of the permanent way and rolling stock by the application of Norris's Patent is incalculable; and wherever adopted must very considerably decrease working expenses. 115
To railway companies, having old and bad roads, the principle is peculiarly advantageous, as its application will not only restore the road to a perfectly safe and serviceable state for many years, but, at the same time, bring into efficient use all the old and broken chairs.
To the railway world in general it is of the greatest value, as it admits of the easiest locomotion, and is most simple and economical in principle.
Every information will be given, and models forwarded for inspection, on application to the manager, at the offices of the company, Wolverhampton.

TO ENGINEERS AND BOILER MAKERS.—In consequence of the LOW PRICE at which I am able to SELL my PATENT SOLID BRASS TUBES, several unscrupulous persons, who are not able to compete with me, have made all kinds of FALSE REPORTS, with the view to prejudice consumers. Among others, they state "that my tubes are heavier than ordinary brass tubes of the same thickness, and that, therefore, though sold at a less price per lb., they are dearer in the end, as there is a greater number of pounds in a tube." I, therefore, consider it right to CAUTION CONSUMERS against such IMPOSITION, and to inform them that the MATERIAL I use is NOT HEAVIER than any other brass; and, in order to guard against any mistake, purchasers are requested, when ordering tubes, to state the weight per foot they require them, as well as the gauge, and no charge will be made for any excess over and above such weight. 116
French Walls, near Birmingham, Sept. 19, 1854. G. F. MUNTZ, Jun.

MESSRS. JOBSON AND CO., LITCHURCH WORKS, DERBY, having their PATENT PROCESS of MOULDING in FULL OPERATION at the above works, beg to call the attention and inspection of the casting trade to the very important results obtained, both as to SAVING IN COST OF MOULDING and the QUALITY of the CASTINGS produced, the former being found from 30 to 80 per cent., after 18 months' experience, according to the class of work, and the latter, even in unskilful hands, is of a higher character than can be accomplished by the most skilful workmen by the old system.—LICENSES LET. 117

TIMBER.—TO RAILWAY COMPANIES, CONTRACTORS, BUILDERS, &c.
MACKINNON AND CO., COMMISSION AGENTS, MONTREAL, CANADA (and Agents in North America for Messrs. William Fairbairn and Sons, Manchester, &c.), are prepared to make SELECTIONS and PURCHASES in CANADA of OAK, ELM, ASH, BIRCH, RED and WHITE PINE, HACMATAC, SPRUCE, &c., either in bauk of specified lengths, or cut to any scantling, such as suitable for railway sleepers, railway wagon and carriage manufacture, flooring and roofing purposes, sheet piling, &c., thereby saving waste, freight, and additional cost of cutting-up in England.
MACKINNON and Co. are also prepared to STATE PRICES (in sterling money) of above, delivered free on board at Montreal or Quebec.
Montreal, July 17, 1854. 118
REFERENCES.—Messrs. W. FAIRBAIRN and SONS, Manchester.
Messrs. LAURIE, CLARK, and Co., Liverpool.

ORE CRUSHING.—CAUTION.—I hereby CAUTION all persons MANUFACTURING, USING, and SENDING, without special license from me, MACHINES for the purpose of CRUSHING, PULVERIZING, and AMALGAMATING mineral and other substances, in which BALLS or SPHERES ARE USED IN CONNECTION WITH, OR MOVED BY, A REVOLVING PLATE OR PLATES, the same having been secured to me through, and in the name of, my agent, C. J. Wallis, under various modifications, by Her Majesty's Letters Patent for England and the Colonies, dated June and December, 1852. Signed, J. W. COCHRAN 119

NOTICE.—TO DIRECTORS OF MINES AND OTHERS.—DREWE'S CRUSHING, WASHING, and AMALGAMATING MACHINES will be REMOVED on THURSDAY, the 9th of November next, from the Windsor Ironworks. It is, therefore, desirable that all gentlemen interested in the dressing of gold, silver, lead, copper, or tin ores, should call at the works before that day.
Windsor Ironworks, City-road, Oct. 27, 1854. 120

THE REAL VALUE OF MINING PROPERTY ASCERTAINED BY E. D. SMITH'S GOLD AMALGAMATOR. 121
OFFICE, No. 441, STRAND, where a prospectus may be obtained, containing the results of experiments, opinions of the press, &c. Ore tested for companies and private parties, and a return made within one week after.—For particulars, address a letter to the patentee, as above.

NOTICE TO MINING COMPANIES AND RAILWAY DIRECTORS.—The AIR-ENGINE TELEGRAPH is PATENTED. From all parts of a mine to and from the surface, INSTANTER SIGNALS are given by means of a cylinder and piston (3 inch diameter) attached to the steam-engine whistle or powerful bell, and worked at a mile, or unlimited distances, by similar cylinders placed at the end and intermediate parts of a ¼-in. gutta percha conductor. 122
RAILWAY ENGINEERS unanimously admit, that by this powerful ENGINE TELEGRAPH each of the guards on a railway train may now work the steam-whistle, &c., INSTANTER, as readily as the driver. (See Parliamentary Report, June, 1854.)
Southampton, Nov., 1853. C. R. PALMER.

TO SHIPPERS, CONTRACTORS, AND EMIGRANTS.—FOR SALE, PORTABLE STEAM-ENGINES ON WHEELS, complete, for travelling and immediate use, at the MANUFACTURER'S PRICES. Sizes to order, from 6 to 30-horse power, fitted with improved boilers; packed and delivered at the docks ready for shipment, if required. Circular and upright Saw Frames, Hydraulic Presses, &c. J. ORANGE, Rutland Foundry, Nottingham. 123

STEAM STAMPS, 5-horse power, complete, from £120 to £160.
STEAM HAMMERS of any size at a short notice, fitted with the newest improvements in regulation. The stamps are in full operation, each one crushing 30 tons per day. 124
PORTABLE ENGINES and BOILERS, complete, MOUNTED ON WHEELS, and of any power, for mining and other purposes, supplied at a few days' notice, under license from the patentees.
Address, Mr. ISHAM BAGGS, *Mining Journal* office, 26, Fleet-street.

MINING ENGINES TO BE LET ON HIRE, OR FOR SALE IMPORTANT TO ALL INTERESTED IN MINING PROPERTY.—Mining engines may be set to work without fixing, chimney, or engine-house, and the real value of the mine tried at a small cost, by the HIRE of MEDWIN AND HALL'S PATENT PORTABLE PUMPING AND WINDING ENGINES. Are strong, simple, mounted on broad wagon wheels, horse shafts, to remove at pleasure. Several are ready for immediate delivery, either to be let at rental or purchase, of 10, 12, 16, 25, to 40-horse power.—Apply to Messrs. MEDWIN and HALL, engineers, No. 92, Blackfriars-road, London, where terms and reports respecting the working of these engines for years may be obtained. 125

PATENT SAFETY FUSE.—The GREAT EXHIBITION PRIZE MEDAL was AWARDED to the MANUFACTURERS of the ORIGINAL SAFETY FUSE, BICKFORD, SMITH, DAVEY, and PRYOR, who beg to inform Merchants, Mine Agents, Railway Contractors, and all persons engaged in Blasting Operations, that, for the purpose of protecting the public in the use of a genuine article, the PATENT SAFETY FUSE *has now a thread wrought into its centre*, which, being patent right, infallibly *distinguishes it from all imitations*, and ensures the continuity of the gunpowder. 126
This Fuse is protected by a Second Patent, is manufactured by greatly improved machinery, and may be had of any length and size, and adapted to every climate.
Address,—BICKFORD, SMITH, DAVEY, and PRYOR, Tuckingmill, Cornwall.

SAFETY FUSE.—Messrs. WILLIAM BRUNTON and CO., PENHALLICK, near REDRUTH, CORNWALL, MANUFACTURERS OF FUSE, of every size and length, as exhibited in the Great Exhibition of 1851, and supplied to the Royal Arsenal at Woolwich, the Arctic Expedition, and every part of the globe.
Messrs. BRUNTON & CO. are at all times PREPARED to EXECUTE UNLIMITED ORDERS for SUPPLYING FUSE direct from their own MANUFACTORY, upon warrant that it will prove equal to, if not better, than any to be procured elsewhere. 127

PATENT IMPROVED WIRE ROPE WORKS, MILLWALL, POPLAR.—A. J. HUTCHINGS, and CO., Sole Makers to the Lords of the Admiralty.—ROUND and FLAT ROPES, of every description, suitable for mining operations or other purposes, GALVANIZED or UNGALVANIZED, MANUFACTURED upon an IMPROVED PRINCIPLE, ensuring great pliability and durability. The superiority of these ropes over hempen ones, in point of strength, lightness, durability, and cost, is admitted by all who have tried them.
GUIDE ROPES, SIGNAL CORD, LIGHTNING CONDUCTORS, &c. 128
Offices, 117, Fenchurch-street, London.

IMPROVED PATENT WIRE ROPE.—Mr. ANDREW SMITH, the ORIGINAL INVENTOR of WIRE ROPE, LIGHTNING CONDUCTORS, and SUBMARINE TELEGRAPHS, solicits the attention of the public to his IMPROVED PATENT MANUFACTURE, as the best and cheapest, having obtained his sixth patent since 1835.
Office, 69, Princes-street, Leicester-square, London. 129

IMPROVED POTTERY FURNACES.—Mr. LEE STEVENS'S system of SMOKE PREVENTION and ECONOMY of FUEL, successfully applied to steam-boiler and other furnaces in above thirty varieties of form, is AVAILABLE FOR POTTERY FURNACES GENERALLY.
Particulars given at 1, Fish-street-hill, City, London. 130

SMOKELESS FURNACE, COMPLETE COMBUSTION, AND ECONOMY.—The legislative enactment for the suppression of the smoke nuisance being now in operation, rendering it compulsory on the part of furnace proprietors to adopt the best means for its abolition, C. J. FOX calls the attention of the scientific public to the PLAN PATENTED by Messrs. ELMSLIE and SIMPSON, of which he is the SOLE LICENSEE, as being THOROUGHLY EFFICACIOUS, causing a LARGE SAVING IN FUEL, and as one of the most SIMPLE and ECONOMICAL in first cost yet offered to the public. It can be fixed in a period in no case exceeding a day, and without any disturbance to the furnace.—Full particulars may be obtained of C. J. Fox, engineer, 4, Pickard-street, City-road, where testimonials of its complete success may be seen. 131

Third Edition, price Sixpence,
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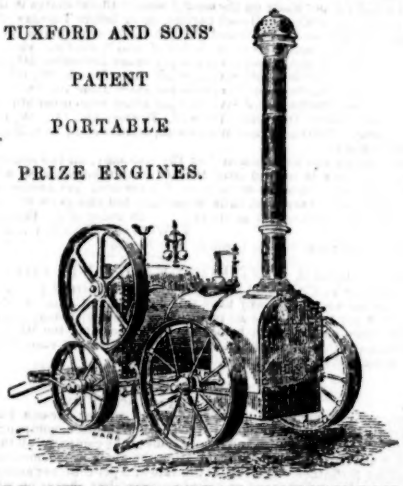
London: Effingham Wilson, 11, Royal Exchange; Edward Stanford, 6, Charing-cross. Price Sixpence; and remitted by post on receipt of eight postage stamps.

NOTICE AND CAUTION.—THE CHAMPION BRICK PRESSING MACHINE.
THE BRICK PRESSING (OR MOULDING) MACHINES which have been made and sold under this name by Mr. W. C. S. Percy and others have been proved an INFRINGEMENT upon CLAYTON'S PATENT. PUBLIC CAUTION is hereby given against any INFRINGEMENT of CLAYTON'S PATENT CLAY-SCREENING, TILE, PIPE, or BRICK MACHINERY. 133
[IN THE COURT OF EXCHEQUER—CLAYTON v. PERCY.]
The trial for infringement on this patent took place at the Guildhall, in the City of London, on Saturday, the 2d of July, before Lord Chief Baron Pollock and a special jury, when a verdict was recorded proving the infringement upon, and establishing Clayton's patent on every point and claim of his patent.
Mr. CLAYTON, therefore, hereby CAUTIONS all persons against the MANUFACTURE, SALE, or USE of his SCREENING APPARATUS, for forcing clay through to cleanse it from stones or other extraneous matters, in the TILE, BRICK, or POTTERY MANUFACTURE, or any other portion of his patent, without his license, otherwise such persons will be liable to injunction to restrain the further manufacture, sale, or use thereof.—HENRY CLAYTON, sole patentee and manufacturer, Atlas Works, Upper Park-place, Dorset-square, London.

ASSAYING.—CITY SCHOOL OF CHEMISTRY AND ASSAY OFFICE, DUNNING'S ALLEY, BISHOPSGATE STREET WITHOUT. Conducted by JOHN MITCHELL, F.C.S., Author of Manual of Practical Assaying, Manual of Agricultural Analysis, Treatise on the Adulteration of Food, Metallurgical Papers, &c. ASSAYS and ANALYSES of MINERALS, METALS, and every manufacturing product.
SPECIAL INSTRUCTION in ASSAYING and CHEMISTRY for gentlemen intending to proceed to the colonies.
All enquiries respecting scale of fees, &c., to be addressed as above. 134

TO MINING COMPANIES, AND ALL CONNECTED WITH STEAM-POWER.—PLANS, SPECIFICATIONS, with ESTIMATES of ALL KINDS of CORNISH MACHINERY, comprised of the most approved modern descriptions and economical principle, may be SEEN at the offices of the Cornish Engineers and General Contractors, Cannon-street Chambers, Cannon-st., City, London. 135

TUXFORD AND SONS'
PATENT
PORTABLE
PRIZE ENGINES. 136



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For illustrated catalogues, with prices and references, apply to the patentees, TUXFORD and SONS, engineers, Boston, Lincolnshire.
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MANUFACTURED BY
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*MANCHESTER.*
The attention of parties who employ
Lifting Jacks,
Is respectfully requested to the superiority of those annexed, over those hitherto in use.

IMPROVED RATCHET JACK. HALEY'S PATENT LIFTING JACK. 137

DEAFNESS! DEAFNESS!—IMPORTANT DISCOVERY.—Dr. MANFRED, M.R.C.S., has this day published, free by post for eight postage stamps, a "PHYSICIAN'S GUIDE FOR COUNTRY PATIENTS," for the PERFECT and PERMANENT RESTORATION OF HEARING, by his invaluable new treatment. Being a stop to quackery, cruel impositions on the suffering public, and exorbitant charges, this book will save thousands from the impositions of the self-styled doctors, inasmuch as the hearing can be restored for life. Deafness of the most inveterate nature relieved in half-an-hour, cured in a few hours, and almost instant cessation of noises in the ears and head, by painless treatment. Hundreds of letters may be seen, and persons referred to, who have heard the usual tone of conversation in a few hours.—Patients received daily at Dr. Manfred's residence, 72, Regent-street, London (first door in Air-street), where all letters must be addressed. 138

Just published, New and Cheaper Edition, price 1s.; or by post for 1s. 6d.,
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"What is infirm from your sound parts shall fly,—
Health shall live free and sickness freely die."—*Shakspeare.* 140
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GLENFIELD PATENT STARCH, USED IN HER MAJESTY'S LAUNDRY.
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# THE MINING SHARE LIST.

| Shares. | Mines. | Paid. | Last Price. | Present. | Dividends per Share. | Last Paid. |
|---|---|---|---|---|---|---|
| 5120 | Alfred Consols (copper), Phillack | £2 11s. 10d. | £18 | 17 18 | £12 7 0 | £0 8 0—Oct., 1854. |
| 8000 | Altgoed Consols Slate Quarry | 2 | 1⅛ | 1⅜ | 0 3 0 | 0 1 6—July, 1854. |
| 2000 | Anglesea Coal Company | 4 | — | | 0 10 0 | 0 2 0—Nov., 1852. |
| 1624 | Balleswidden (tin), St. Just | 11¼ | 6¼ | | 12 5 0 | 0 5 0—Jan., 1854. |
| 5000 | Bat Holes, Worthen, Salop | 1l. 17s. 6d. | — | | 0 10 0 | 0 10 0—April, 1853. |
| 4000 | Bedford United (copper), Tavistock | 3⅜ | 10 | 10 | 6 5 6 | 0 7 0—Aug., 1854. |
| 5000 | Black Craig (lead), Kirkcudbrightshire | 5 | 1 | | 0 5 0 | 0 2 6—July, 1853. |
| 124 | Bosweddin and Wheal Castle | — | — | | 5 0 0 | 5 0 0—May, 1853. |
| 200 | Botallack (tin, copper), St. Just | 91¼ | 330 | | 313 5 0 | 8 0 0—Oct., 1854. |
| 1000 | Bryntail, Llanidloes, Montgomeryshire | 7 | 5 | 3 4 | 0 5 0 | 0 5 0—June, 1851. |
| 5000 | Callington (lead, copper), Callington | 7l. 17s. | 2 | | 1 8 0 | 0 4 0—Sept. 1847. |
| 1000 | Carn Brea (copper, tin), Illogan | 15 | — | | 229 10 0 | 2 0 0—April, 1854. |
| 10000 | Castle Slate Quarry, Dolwyddlan | 1 | 1⅛ | | 0 1 9 | 0 0 9—Aug., 1854. |
| 256 | Comford (copper), Gwennap, Cornwall | 75 | 13 | | 9 0 0 | 3 0 0—June, 1850. |
| 256 | Condurrow (copper, tin), Camborne | 20 | 105 | | 52 0 0 | 2 0 0—June, 1854. |
| 128 | Cwmystwith (lead), Cardiganshire | 60 | 185 | | 40 0 0 | 5 0 0—May, 1854. |
| 1024 | Devon Great Consols (copper), Tavistock | 1 | 390 | 395 | 405 0 0 | 9 0 0—Sept., 1854. |
| 12000 | Dhurode (copper), Ireland | 1 | ⅝ | | 0 3 0 | 0 1 8—Nov., 1853. |
| 672 | Ding-Dong (tin), Gulval | 5 | — | | 55 0 0 | — —1850. |
| 179 | Dolcoath (copper, tin), Camborne | 257¼ | 80 | | 873 4 0 | 3 0 0—Feb., 1854. |
| 2800 | Drake Walls (tin, copper), Calstock | 1l. 9s. | 2 | | 0 6 6 | 0 1 6—April, 1853. |
| 300 | East Darren (lead), Cardiganshire | 32 | 80 | | 4 0 0 | 2 0 0—Jan., 1853. |
| 128 | East Pool (tin, copper), Pool, Illogan | 24¼ | — | | 238 0 0 | 2 10 0—April, 1854. |
| 128 | East Wheal Rose (silver-lead), Newlyn | 50 | — | | 2245 0 0 | 10 0 0—March, 1852. |
| 1024 | East Wheal Margaret (tin, copper) | 5⅜ | 11¼ | | 0 5 0 | 0 5 0—Feb., 1854. |
| 1200 | Eyam Mining Company, Derbyshire | 3⅜ | 18¼ | | 3 13 4 | 0 10 0—Sept., 1854. |
| 494 | Fowey Consols (copper), Tywardreath | 40 | 1⅛ | | 309 13 0 | 1 10 0—Aug., 1850. |
| 2240 | Foxdale, Isle of Man | 7l. 10s. 6d. | 25 | | 41 7 3 | 1 0 0—Oct., 1854. |
| 320 | Ditto (New Shares of 25l. each) | 20 | 20 | | 2 4 0 | 0 16 0—Oct., 1854. |
| 4448 | General Mining Co. for Ireland (cop., lead) | 2⅜ | 2 | | 1 0 8 | 0 3 3—June, 1853. |
| 2000 | Goginan (lead), Cardiganshire, Wales | 4⅜ | 6 | | 22 0 0 | 5 0 0—Sept., 1850. |
| 1024 | Gonamena (copper), St. Cleer | 13¼ | 10⅛ | 10 10⅛ | 0 7 6 | 0 7 6—Dec., 1852. |
| 30000 | Great Crinnis (copper), St. Austell | 1 | 1 | ⅝ | 0 1 0 | 0 1 0—Sept., 1854. |
| 13750 | Great Polgooth (tin), St. Austell | 3⅜ | ⅛ | | 0 10 0 | 0 4 0—Oct., 1852. |
| 119 | Great Work (tin), Germoe | 100 | — | | 176 10 0 | 5 0 0—Aug., 1854. |
| 1024 | Herodsfoot (lead), near Liskeard | 8⅛ | 7 | | 2 12 6 | 0 7 6—April, 1854. |
| 6000 | Hingston Down Consols (copper), Calstock | 3⅜ | 14⅛ | 14¼ ⅝ | 0 10 0 | 0 5 0—May, 1854. |
| 1000 | Holmbush (lead, copper), Callington | 25 | 8 | | 25 0 0 | — —Feb. 1844. |
| 2000 | Holyford (copper), near Tipperary | 11 | — | | 3 5 0 | 0 5 0—Sept., 1852. |
| 76 | Jamaica (lead), Mold, Flintshire | 3l. 13s. 6d. | — | | 330 0 0 | 5 0 0—March, 1851. |
| 20000 | Kenmare and West of Ireland | 1 | ⅛ | | 0 1 6 | 0 1 6—Sept., 1853. |
| 2048 | Kenneggy (copper), Breage | 6s. 7d. | ¾ | | 0 4 0 | 0 4 0—March, 1854. |
| 786 | Kirkcudbrightshire (lead), Kirkcudbright | 9⅜ | — | | 1 15 0 | 0 5 0—May, 1854. |
| 20000 | Lackamore (copper), Tipperary, Ireland | 1 | ⅛ | ⅜ ⅛ | 0 1 0 | 0 1 0—July, 1853. |
| 20 | Laxey Mining Company, Isle of Man | 100 | 1000 | | 1250 0 0 | 20 0 0—Aug., 1854. |
| 5000 | Lewis (tin, copper), St. Erth | 3l. 8s. | 2 | | 0 2 0 | 0 2 0—Aug., 1851. |
| 160 | Levant (copper, tin), St. Just | 2⅜ | — | | 1042 0 0 | 2 0 0—Aug., 1854. |
| 400 | Lisburne (lead), Cardiganshire, Wales | 18¾ | 200 | | 216 5 0 | 5 0 0—June, 1854. |
| 320 | Machno Slate and Slab Company | 25 | 30 | | 1 17 6 | 1 5 0—June, 1853. |
| 160 | Ditto (New Shares) | 12⅛ | 15 | | 0 12 6 | 0 12 6—June, 1853. |
| 6000 | Marke Valley (copper), Caradon | 4l. 10s. 6d. | — | | 0 2 6 | 0 2 6—May, 1853. |
| 5000 | Mendip Hills (lead), Somerset | 3¾ | — | | 0 10 0 | 0 10 0—May, 1853. |
| 5000 | Merllyn (lead), Flint | 2¾ | ⅝ | | 1 11 0 | 0 2 6—June, 1853. |
| 20000 | Mining Co. of Ireland (copper, lead, coal) | 7 | 17⅛ | 17¾ | 9 12 6 | 0 10 6—July, 1854. |
| 5000 | Nantlle Vale (slate), Llanllyfni | 1 | 2 | | 0 2 6 | 0 1 3—Nov., 1853. |
| 470 | Newtonards Mining Company, Co. Down | 50 | — | | 37 0 0 | 2 0 0—July, 1854. |
| 200 | North Pool (copper, tin), Pool | 22⅛ | 170 | | 318 0 0 | 5 0 0—Aug., 1854. |
| 140 | North Roskear (copper), Camborne | 10 | — | | 249 10 0 | 4 0 0—Sept., 1853. |
| 6000 | North Wheal Basset (copper, tin), Illogan | nil. | 19 | 18¾ 19¼ | 3 1 0 | 0 5 0—Sept., 1854. |
| 6400 | Par Consols (copper), St. Blazey | 1⅛ | 8⅛ | | 23 6 0 | 0 10 0—July, 1853. |
| 500 | Peak United (lead), North Derbyshire | 7¾ | — | | 3 0 0 | 0 10 0—Oct., 1854. |
| 160 | Perran St. George (cop., tin), Perranzabuloe | 21⅛ | — | | 1 15 0 | 0 10 0—June, 1851. |
| 200 | Phœnix (copper, tin), Linkinghorne | 30 | — | | 50 0 0 | 10 0 0—Nov., 1853. |
| 1000 | Polberro (tin), St. Agnes | 15 | 1⅜ | | 6 6 0 | 1 1 0—Sept., 1854. |
| 560 | Providence Mines (tin), Uny Lelant | 20⅜ | 17 | | 21 19 6 | 0 10 0—Aug., 1854. |
| 1948 | Rix Hill (tin), Tavistock | 3⅛ | — | | 0 8 0 | 0 4 0—Jan., 1853. |
| 256 | South Caradon (copper), St. Cleer | 2⅛ | 290 | 270 | 334 0 0 | 8 0 0—Sept., 1854. |
| 9000 | South Tamar (silver-lead), Beerferris | 1l. 6s. 6d. | 9¼ | 8¼ 8⅛ | 2 2 6 | 0 7 6—Sept., 1854. |
| 256 | South Tolgus (copper), Redruth, Cornwall | 16 | 120 | | 69 0 0 | 4 0 0—May, 1853. |
| 248 | South Wheal Frances (copper), Illogan | 37⅜ | 275 | | 254 5 0 | 5 0 0—Sept., 1854. |
| 1024 | Spearne Consols (tin), St. Just, Cornwall | 1¼ | — | | 8 8 6 | 0 2 6—Dec., 1853. |
| 1024 | St. Aubyn and Grylls (copper, tin), Breage | 3 | 2⅛ | 2 | 0 17 6 | 0 7 6—April, 1852. |
| 94 | St. Ives Consols (tin), St. Ives | 80 | — | | 888 0 0 | 8 0 0—Feb., 1854. |
| 1000 | Stray Park and Camborne Vean (copper) | 10¾ | — | | 11 10 0 | 3 0 0—Oct., 1850. |
| 9600 | Tamar Consols (silver-lead), Beeralston | 4⅛ | 1⅜ | | 4 11 0 | 2 0 0—Feb., 1853. |
| 6000 | Tincroft (copper, tin), near Pool, Illogan | 7⅜ | 2 | 1⅛ | 6 18 6 | 0 10 6—Feb., 1853. |
| 2048 | Trehane (silver-lead), Menheniot | ¾ | 6⅛ | 6 | 7 6 3 | 0 5 0—Sept., 1854. |
| 5000 | Treleigh Consols (copper), Redruth | 6 | — | | 1 3 0 | 0 5 0—Oct., 1847. |
| 572 | Trelyon Consols, (tin), St. Ives | 11⅛ | 24 | | 1 15 0 | 1 0 0—Feb., 1854. |
| 96 | Tresavean (copper), Gwennap, Cornwall | 32½ | — | | 4665 15 0 | 5 0 0—Sept., 1854. |
| 120 | Trethellan (copper), Gwennap, Cornwall | 7⅛ | — | | 403 13 6 | 2 10 0—April, 1851. |
| 120 | Treviskey and Barrier (copper), Gwennap | 130 | 40 | | 303 10 0 | 4 0 0—March, 1854. |
| 4096 | Trewetha (silver-lead), Menheniot, Cornwall | 1 | 3⅛ | 3 | 0 13 0 | 0 3 0—June, 1854. |
| 100 | Trumpet Consols (tin), near Helston | 95 | — | | 50 0 0 | 5 0 0—March, 1854. |
| 400 | United Mines (copper), Gwennap | 40 | 120 | 120 | 47 5 0 | 2 0 0—Feb., 1854. |
| 1024 | Wellington (copper, tin), Perranuthnoe | 8¼ | — | | 2 2 6 | 0 5 0—March, 1851. |
| 7500 | Welsh Potosi (silver-lead), Talybont, Card. | 5 | 7 | 7½ 8 | 0 10 0 | 0 10 0—Aug., 1854. |
| 3000 | Ditto | 3⅛ | 3¾ | 4 4½ | 0 4 0 | 0 4 0—Aug., 1854. |
| 6000 | West Basset (copper), Illogan | 1¾ | 30½ | | 1 0 0 | 1 0 0—Sept., 1854. |
| 256 | West Caradon (copper), Liskeard | 20 | 190 | | 257 5 0 | 3 0 0—Oct., 1854. |
| 256 | West Damsel (copper), Gwennap | £10 7 | 140 | | 4 0 0 | 2 0 0—Sept., 1854. |
| 1024 | West Providence (tin), St. Erth | 5 | 19 | | 22 0 0 | 2 0 0—Jan., 1854. |
| 1024 | West Wheal Darlington | 12l. 18s. | 3 | 4 | 0 5 0 | 0 5 0—Dec., 1853. |
| 200 | West Wheal Seton (copper), Camborne | 77 | 200 | | 10 0 0 | 5 0 0—Oct., 1854. |
| 1228 | Wheal Arthur (copper), Calstock | 7 | 22⅛ | | 3 0 0 | 0 10 0—Aug., 1854. |
| 256 | Wheal Basset (copper), Illogan | 10¼ | 575 | 560 580 | 564 10 0 | 22 10 0—Aug., 1854. |
| 256 | Wheal Brewer (copper), Gwennap | 4 | — | | 5 0 0 | 2 10 0—1845. |
| 256 | Wheal Buller (copper), Redruth | 5 | 735 | 680 700 | 581 5 0 | 30 0 0—Sept., 1854. |
| 250 | Wheal Clifford (copper), Gwennap | — | 145 | | 3 13 8 | 2 5 6—March, 1853. |
| 5136 | Wheal Exmouth and Adams United | 4l. 14s. | 8⅛ | | 1 2 6 | 0 2 6—Aug., 1854. |
| 100 | Wheal Friendly (tin), St. Agnes | 70 | — | | 5 0 0 | 5 0 0—1850. |
| 128 | Wheal Friendship (copper), Devon | — | 115 | | 2375 10 0 | 8 0 0—May, 1854. |
| 5000 | Wheal Golden (sil.-lead), Perranzabuloe | 4¼ | ⅝ | | 1 5 0 | 0 5 0—Sept., 1852. |
| 6000 | Wheal James (iron, copper), Roche | 1l. 4s. | ¼ | | 0 2 0 | 0 2 0—May, 1853. |
| 512 | Wheal Jane (silver-lead), Kea | nil. | 10 | | 4 10 0 | 1 0 0—Oct., 1853. |
| 430 | Wheal Lovel (tin), Wendron | 33 | 52 | | 28 0 0 | 2 0 0—May, 1854. |
| 112 | Wheal Margaret (tin), Uny Lelant | 79 | 100 | | 220 0 0 | 5 0 0—May, 1854. |
| 512 | Wheal Mary Ann (lead), Menheniot | 5¼ | 37 | 37 | 28 15 0 | 2 0 0—March, 1854. |
| 80 | Wheal Owles, St. Just, Cornwall | 70 | 390 | | 160 13 0 | 12 10 0—Aug., 1854. |
| 240 | Wheal Reeth (tin), Uny Lelant | 24¼ | — | | 40 10 0 | 3 0 0—Sept., 1852. |
| 198 | Wheal Seton (tin, copper), Camborne | 107 | 250 | | 254 10 0 | 8 0 0—April, 1854. |
| 520 | Wheal Trelawny (silver-lead), Liskeard | 8⅜ | 41 | 37 39 | 46 10 0 | 1 10 0—Oct., 1854. |
| 1024 | Wheal Tremayne (tin, copper), Gwinear | 9⅜ | 6 | | 10 2 6 | 0 7 6—Jan., 1854. |
| 5000 | Wicklow (copper), Wicklow | 5 | 51⅛ | | 24 13 0 | 1 12 6—July, 1854. |
| 5000 | Wrysgan (slate), Festiniog | 1 | 1 | ⅞ 1 | 0 2 0 | 0 1 0—Aug., 1854. |

## FOREIGN MINES.

| Shares. | Mines. | Paid. | Last Price. | Present. | Dividends per Share. | Last Paid. |
|---|---|---|---|---|---|---|
| 5000 | Alten Mining Company (copper), Norway | £14⅛ | 3½ | 2⅜ | 4 5 0 | 0 15 0—Nov., 1853. |
| 72000 | Baden, Grand Duchy of | 1 | ¼ | | 0 1 0 | 0 1 0—Nov., 1852. |
| 10000 | Brazilian Imperial (gold), Brazil | 25⅛ | 2¾ | 2⅛ 3 | 34 17 6 | 0 10 0—Dec., 1844. |
| 2464 | Burra Burra (copper), South Australia | 5 | 155 | | 150 0 0 | 5 0 0—June, 1854. |
| 12000 | Cobre Copper Company (copper), Cuba | 40 | 44 | 46 48 | 65 12 0 | 4 0 0—July, 1854. |
| 100000 | Colonial Gold, Australia | 1 | ¼ | ⅜ ¼ | 0 1 6 | 0 1 6—March, 1854. |
| 10000 | Copiapo Mining Company (copper), Chili | 16 | 13¼ | 13 14 | 3 18 0 | 0 5 0—Oct. 1851. |
| 20000 | General Min. Assoc. (iron, coal), Nova Scotia | 20 | 15 | | 8 0 0 | 0 10 0—June, 1853. |
| 10000 | Linares (lead), Pozo Ancho, Spain | 3 | 8⅜ | 8⅛ 9 | 2 0 6 | 0 15 0—March, 1854. |
| 103815 | Mariquita and New Granada | 1 | ⅛ | | 0 2 0 | 0 1 0—July, 1853. |
| 20000 | Mexican and South American (cop.), Mexico | 9 | 6⅜ | 6¾ 7 | 5 12 6 | 0 7 6—July, 1854. |
| 88715 | North British Australasian | 1 | ⅛ | | 0 0 8 | 0 0 8—March, 1854. |
| 32000 | Obernhof (lead), Nassau | 1 | ⅛ | | 0 1 0 | 0 1 0—June, 1853. |
| 7000 | Royal Santiago (copper), Cuba | 11¼ | 5¾ | 5 5⅛ | 33 4 0 | 1 5 0—July, 1848. |
| 104000 | San Fernando (silver-lead), Linares | 1 | ¾ | ⅝ ¾ | 0 1 9 | 0 0 7—June, 1854. |
| 11000 | St. John del Rey (gold), Brazil | 15 | 29 | | 25 17 6 | 2 0 0—May, 1854. |
| 43174 | United Mexican (silver), Mexico Av. | 28¼ | 3⅛ | 3 3¼ | 1 16 6 | 0 4 0—Feb., 1853. |

## NON-DIVIDEND FOREIGN MINES.

| Shares. | | Paid. | Last Price. | Present. |
|---|---|---|---|---|
| 75000 | Adelaide Land and Gold Comp. | 2 | ⅝ | ⅜ ⅜ |
| 100000 | Agua Fria (gold), California | 1 | 1 | 1⅛ |
| 35000 | Almaden (silver-lead), Spain | 2 | — | |
| 19000 | Australian (cop.), S. Australia | 6 | 1⅛ | 1 1¼ |
| 75000 | Brucutu (gold), Brazil | ⅛ | 1s. | |
| 6000 | Chalanches (sil., cop.), France | 10 | — | |
| 80000 | Clarendon Consols, Jamaica | ⅛ | ¼ | ⅛ ¼ |
| 25000 | Fortuna (silver-lead), Spain | ¾ | 1⅛ | 1 1⅛ |
| 120000 | Gladbach (zinc) Rhenish Pruss. | 1 | ⅜ | |
| 20000 | Iberian (silver-lead), Spain | ⅛ | ⅜ | ¼ |
| 12000 | Jamaica (copper) | 1 | ⅛ | ⅛ ⅜ |
| 20000 | Keweenaw Point (cop., sil.) | 5 | — | |
| 2309 | Kinzigthal Min. Ass., Germany | 4 | 4¾ | |
| 60000 | Liberty (gold), Virginia, U.S. | 1 | ¼ | ⅛ |
| 60000 | Linares, New, (lead, cop.), Spain | 1 | ⅛ | ⅜ |
| 32000 | Louise, Rhenish Prussia | 1 | — | |
| 10000 | Lusitanian Min. Co. for Portugal | 1 | 1¾ | 1⅛ ⅜ |
| 17000 | Metcalfe (copper), Jamaica | 1 | ⅜ | |
| 25000 | Modena (cop., sil.-lead), Italy | 1 | — | |
| 25000 | Nassau (cop.), Rhenish Prussia | 1 | — | |
| 10000 | National Brazilian (gold), Brazil | 20 | 1¾ | |
| 200000 | Nouveau Monde, California | 1 | ¼ | ¼ ⅜ |
| 25000 | Peninsular Mining Company | ⅛ | ⅜ | ⅜ ¾ |
| 10000 | Pontgibaud (sil.-lead), France | 20 | 15⅜ | 15 16 |
| 25000 | Port Royal and St. Andrew's | ½ | ¼ | |
| 60000 | Quartz Rock, California | 1 | ¼ | |
| 100000 | Rhenish Mining Company | ¼ | — | |
| 70000 | Waller, Goochland Co., Virginia | 1 | ¼ | ¼ |
| 75000 | Wildberg (sil.-lead., copper) | 2 | 2⅛ | |
| 100000 | Worthing (cop.), Adelaide | 12s | ⅜ | |

## MINES WHICH HAVE SOLD ORES.

| Shares. | | Paid. | Last Price. | Present. |
|---|---|---|---|---|
| 500 | Albion (porcelain & bleach. clay) | 6¼ | — | |
| 3000 | Altarnun Con. (tin, cop.), Altar. | 2⅜ | 1¾ | |
| 4000 | Augusta Con. (cop.) Bridestowe | 1⅜ | — | |
| 940 | Balnoon Con. (tin), Uny Lelant | 2 | — | |
| 4081 | Balleswidden United | 1 | ⅜ | |
| 12000 | Ballygoneen (lead), Wicklow | 1 | ⅛ | |
| 15000 | Barytes Company of Ireland | 1 | 1⅛ | |
| 3000 | Beacon (tin), Roche | ⅝ | ¼ | |
| 508 | Bell and Lanarth, Gwennap | 11 | 2¾ | 2 2⅛ |
| 8000 | Bicton Consols (lead), St. Ives | 1⅜ | — | |
| 1500 | Birch Aller, Bridford | 6¼ | 5⅛ | |
| 3000 | Birch Tor and Vitifer, Lydford | £2 5 6 | ⅛ | ⅛ |
| 2000 | Bishopstone United | 1 | — | |
| 4000 | Ditto Glamorgan | ¼ | — | |
| 20000 | Bodmin United | 13s. 6d. | ¾ | |
| 144 | Bodmin West Downs (tin, cop.) | 1 | — | |
| 1000 | Boiling Well (copper) | 10 | 15 | |
| 120 | Bollowall and Nanpean (tin) | 20 | — | |
| 4096 | Boringdon Consols, Plympton | 4 | 1⅛ | |
| 240 | Boscean (tin), St. Just | 20 | 85 | |
| 5250 | Bottle Hill (copper), Plympton | 9s. | — | |
| 4000 | Braich Goch Slate Quarries | ⅛ | — | |
| 20000 | Britannia, Devon | £1 7 | 6d. | |
| 128 | Britannia, Llanarmon | 4 | — | |
| 4000 | Bronfloyd (lead), Wales | ¾ | — | |
| 420 | Budnick Consols (tin), Perran | 2⅜ | 3½ | |
| 2800 | Bwlch (sil.-lead), Cardiganshire | 4 | 3 | |
| 6000 | Caegwain (gold), Merioneth | ⅛ | ½ | |
| 5000 | Cae-Gynon, Cardiganshire | ⅜ | ⅜ | ⅜ |
| 1024 | Caerphilly & Carfnnon, S. Wales | 3 | — | |
| 3000 | Cally (cop., lead), Kirkcudbright | £1 2 | — | |
| 4000 | Calstock Consols (copper) | 4 | — | |
| 4000 | Calstock United (tin and cop.) | 3⅜ | 1⅛ | |
| 1000 | Camborne Consols | 2 | — | |
| 1024 | Caradon Consols, St. Cleer | 5 | — | |
| 2000 | Carbona (tin, copper), Crowan | 7 | ⅜ | ⅜ |
| 50000 | Carnarvonshire Slate | 1 | 1¾ | |
| 2048 | Carnyorth (tin), St. Just | 1¾ | — | |
| 8500 | Carrack Dews United, St. Ive's | £1 8 | 1⅛ | |
| 1055 | Carvannall (copper), Gwennap | £9 14 5 | 3½ | |
| 4096 | Castle Dinas (tin), St Colomb | 2¾ | 1s. 6d. | |
| 6000 | Caylan, North Wales | 2 | 2⅛ | |
| 200 | Cefn Brwyno (lead), Cardigansh. | 33 | 85 | |
| 2000 | Clara | 1 | 1⅛ | 1⅜ |
| 1024 | Clijah & Wentworth (tin, cop.) | 9⅛ | 12 | |
| 8000 | Clowance Wood | 8s. | ⅜ | |
| 2000 | Coed Mawr Pool (lead), Llanrwst | £6 8 | — | |
| 15000 | Connemara, Galway | 1 | ⅜ | |
| 2510 | Cook's Kitchen, Illogan | £15 18 9 | — | |
| 20000 | Cosheen (copper), Cork | 1 | 1¼ | |
| 900 | Court Grange, Cardiganshire | 10 | — | |
| 1055 | Craddock Moor (cop.), St Cleer | £7 10 | — | |
| 6130 | Craigwen, Dinas Mowddwy | 1 | 1 | |
| 600 | Craig-y-Mwyn (lead), Llanrhiadr | 8⅜ | — | |
| 512 | Creegbrawse (copper), Cornwall | 13¼ | — | |
| 1500 | Crookhaven (copper), Cork | 10 | — | |
| 6000 | Crow Hill, Ireland | £1 6 | — | |
| 6400 | Crow Hill, St. Stephen's | 1 | — | |
| 9000 | Cubert (silver-lead), Cornwall | 2⅜ | ⅜ | ¼ ⅜ |
| 10000 | Cwm Darren (lead), Cardigansh. | 13s. | ⅜ | ⅛ |
| 6700 | Cwmdyle Rock & Green Lake | 3⅛ | 1⅛ | |
| 1000 | Cwm Erfin (lead), Cardigansh. | 8 | — | |
| 3000 | Dalrhiew (cop., lead), Brecon | £2 3 6 | 3 | |
| 1000 | Darren (sil.-lead) Cardiganshire | 5 | 1½ | 1⅛ |
| 1400 | Derwent (sil.-lead), Durham | 60 | — | |
| 3907 | Devon and Courtenay (copper) | ¾ | 2⅛ | |
| 1024 | Devon & Cornwall United (cop.) | 11¼ | — | |
| 5000 | Devon Buller Gt. Consols | 11s. | ¾ | |
| 4000 | Devon Burra Burra (copper) | 3⅛ | — | |
| 1600 | Devon Great Tincroft (tin) | ¼ | — | |
| 6000 | Devon Kapunda (cop. & sil.-lead) | £3 16 | — | |
| 10000 | Devon Tin Mines | 1 | — | |
| 1244 | Duke of Cornwall, Lostwithiel | £10 9 | 1⅛ | |
| 3000 | Dyingwm (lead), Wales | 11⅜ | 13 | 13¼ 14 |
| 256 | Eaglebrook, Llanphangel, Card. | 12¾ | 25 | 30 |
| 4096 | East Alfred Consols (lead, cop.) | £1 1 6 | ¼ | |
| 256 | East Basset (copper), Redruth | 18 | 16 | |
| 1500 | East Birch Tor [A] (tin), Devon | 3 | — | |
| 1000 | East Birch Tor [B] | 1⅛ | — | |
| 1948 | East Crowndale (cop.), Tavistock | 7 | — | |
| 1024 | East Ding Dong (tin), Madron | £3 18 | — | |
| 4000 | East Gunnis Lake Junc. (cop.) | 2⅛ | 1 | |
| 1024 | East Halamanning (tin) | 1 | — | |
| 6000 | East Kitt Hill | 1 | — | |
| 9000 | East Tamar (sil.-ld.), Beerferris | £1 19 | ⅛ | ⅜ ⅛ |
| 256 | East Tolgus (copper), Redruth | 12 | 4 | |
| 4000 | East Wheal Arthur | 8s. 6d. | — | |
| 2048 | East Wheal Bedford, Tavistock | 2¾ | — | |
| 2048 | East Wheal George, Walkhamp. | 2⅛ | — | |
| 512 | East Wheal Leisure, Perran | 16 | — | |
| 4000 | East Wheal Russell, Tavistock | £3 8 0 | 2⅛ | 2 2¼ |
| 3500 | East Wheal Vor (tin) | 1⅜ | ⅜ | |
| 564 | Ecton Mountain, Derbyshire | 10 | — | |
| 536 | Ecton Mountain (lead, copper) | 5 | — | |
| 1280 | Esgair Llee, Llanfihangel-y-Croy | 7 | — | |
| 5000 | Fat-work & Wh. Virtue, St. Col. | £1 2 | — | |
| 5000 | Fee Donald (lead, antimony) | ¼ | 1 | |
| 15000 | Fron-isa and Craigiog (lead) | 1 | ¼ | |
| 12000 | Gallt-Ffrith-Rhedyn (lead) | 3 | 3 | |
| 5000 | Garreg (lead), Flint | £2 8 6 | ¾ | |
| 4000 | Gawton United | £2 7 | 2 | |
| 1024 | Gilmar (tin), St. Erth | £5 10 3 | — | |
| 12000 | Gorn (lead), Llanidloes | 12s. | — | |
| 243 | Grambier & St. Aubyn (copper) | 100⅛ | 25 | |
| 900 | Great Beam (tin), St. Austell | 20 | 12 | |
| 6750 | Great Bryn Consols (cop., tin) | 1⅛ | 9d. | |
| 4000 | Great Cowarch, Merioneth | 4⅛ | 2⅛ | 2⅛ |
| 30000 | Great Hewas United | 1 | ⅜ | |
| 17043 | Great Onslow Cons., Camelford | 1¾ | 1 | |
| 1024 | Great Sheba Consols | 15⅜ | 10 | |
| 6000 | Great South Tolgus | 2 | 6 | |
| 10000 | Gt. Tregune Consols, Altarnun | 1 | — | |
| 1024 | Great Wheal Alfred, Phillack | 33¼ | 24 | 22⅛ 23⅛ |
| 5120 | Great Wheal Baddern (tin) | 2¾ | 2¾ | 2⅛ ¾ |
| 100000 | Gt. Wh. Vor (tin, cop.), Helston | 1 | 1¾ | 1⅛ ⅜ |
| 1024 | Great Wheal Fortune, Breage | £14 7 3 | — | |
| 6000 | Gwaynllifion (lead) | 4s. 6d | — | |
| 512 | Halamanning and Croft Gothal | 94 | 25 | |
| 8192 | Hawkmoor (tin & cop.), Calstock | £1 6d | ¼ | |
| 5000 | Haytor Consols (tin, copper) | 4 | — | |
| 512 | Hellvellyn (cop.), Cumberland. | 1 | — | |
| 1500 | Hennock (silver-lead) Hennock | 8 | 2 | |
| 10000 | Hill Bridge Consols | 1 | 2 | |
| 5000 | Holne Moor (tin), Ashburton | 2 | — | |
| 5000 | Hope Valley (lead) | 1⅛ | — | |
| 12000 | Ivybridge (silver-lead) | 8s. 6d. | 1¼ | |
| 2048 | Kea Tremayne (tin) | nil. | — | |
| 6000 | Keswick (lead), Portinscale | £4 4 | 1 | ¾ 1 |
| 3300 | Kilbricken (silver-lead), Clare | 4⅜ | 1 | |
| 1698 | Lamherooe Wheal Maria (cop.) | 18 | 3 | |
| 1024 | La Min (copper), Gwinear | 5 | 3 | |
| 252 | Lanarth Con. (cop.), Gwennap | 4 | — | |
| 1024 | Leeds and St. Aubyn (tin, cop.) | £5 6 | 6⅛ | |
| 10286 | Leeds Town (tin, cop.), Crowan | 3 | 1¼ | |
| 256 | Lelant Consols (tin), Uny Lelant | 65⅛ | — | |
| 4000 | Loveden United (lead), Cardigan | 1 | — | |
| 20000 | Ludgvan Lease (tin), St. Ives | ⅛ | — | |
| 5056 | Lydford Consols (lead), Devon | 1¾ | ⅜ | ⅜ ⅛ |
| 2500 | Madron United (tin), Cornwall | 5 | 6 | 6 |
| 1024 | Melin Llyn-y-Pair, Merioneth | 2¼ | — | |
| 246 | Mengearne and Tregunstis (tin) | 8 | — | |
| 256 | Messer, Bodmin | 55 | 55 | |
| 6400 | Michell (lead), Flint | 1s. 6d. | ¼ | |
| 4096 | Middleton (lead), Snailbeach | 4s. | — | |
| 1024 | Mill Pool (tin, cop.), St. Hilary | 5⅛ | 2 | |
| 6134 | Mineral Court (tin), St. Austell | ⅛ | — | |
| 7500 | Mixon Great Cons. (cop.), Leek | 1⅛ | 2 | |
| 20000 | Mizen Head, Cork | ⅜ | ⅛ | |
| 10000 | Molland (cop.), South Moulton | 16s. | ¼ | |
| 6400 | Mostyn (lead), Flint | 4s. | ¾ | |
| 1024 | Mount Tiack (tin, cop.), Lelant | 1 | — | |
| 5000 | Nanteos and Penrhiw | 1⅛ | — | |
| 3000 | Nant-y-Car (cop.), nr. Rhayader | 3l. 8s. | 7⅛ | |
| 1024 | North Abram (copper), Crowan | ⅛ | — | |
| 5000 | North Britain Burra Burra | £2 13 | 1⅛ | |
| 1024 | North Buller (copper), Redruth | £10 14 | 2¾ | |
| 6000 | North Damsel (cop.), Gwennap | 1 | — | |
| 1024 | North Ding Dong (tin), Madron | 1 | — | |
| 2000 | North Downs (copper), Redruth | 1 | 4 | |
| 2500 | North Frances (cop.), Illogan | 4⅛ | — | |
| 2000 | North Levant (tin, cop.) St. Just | 1¾ | 7 | |
| 21000 | North Staffordshire Consols | 1 | — | |
| 2000 | North Tamar (silver-lead, cop.) | 1 | — | |
| 10000 | North Towy and Cystanog | 4s. 6d | ⅛ | |
| 1128 | North Wheal Crofty (copper) | £10 14 3 | 7½ | |
| 1024 | North Wh. Robert, Walkampton | 9 | 32 | 29 31 |
| 1060 | North Wheal Trelawny | £4 4 6 | 6⅛ | 6⅜ 7 |
| 12000 | N. Wh. Unity (cop., tin), Gwin. | 1⅛ | — | |
| 2048 | Okel Tor (lead), Calstock | 5 | — | |
| 7980 | Old Avarack & Nancothan United | ⅛ | — | |
| 10000 | Old Trewether Consols | 1 | 1 | |
| 256 | Old Wheal Basset, Illogan | 4 | 5 | |
| 2500 | Orsedd (lead), Flint | 2⅜ | 2 | 2 |
| 12000 | Parkwyn and Carwalsick | 1 | — | |
| 10240 | Pembroke & East Crinnis (cop.) | 5⅛ | 2 | |
| 5000 | Pencorse Consols, St. Enoder | £1 4 | 1⅜ | |
| 1500 | Peneraig (lead), Carnarvon | 4 | — | |
| 5000 | Pendarves & St. Aubyn (tin, co.) | £1 2 | — | |
| 5000 | Penhale Consols (silver-lead) | 3⅛ | 5⅛ | |
| 5000 | Penllyne Court | 14s. 6d | ¾ | |
| 128 | Penmaen (gold), Merioneth | 125 | 5 | |
| 640 | Pen-y-Gelli (lead), Flintshire | 6 | — | |
| 2925 | Penzance Consols | 1¼ | — | |
| 24000 | Perran and Leisure Union | 11s. | ¼ | |
| 12000 | Perran Wheal George | ¼ | ⅜ | |
| 1000 | Peter Tavy & Mary Tavy (cop.) | 5⅜ | — | |
| 2000 | Polgear & Lancarrow (cop., tin) | £2 3 | ⅛ | ⅛ |
| 50000 | Poltimore (cop., gold), Devon | 1 | ¼ | ⅛ ¼ |
| 2400 | Porkellis United (tin), Wend. | £11 13 4 | 7⅛ | |
| 1024 | Praed Con. (tin), Towednack | 1⅛ | — | |
| 6400 | Prideaux Wood, Luxillyan | 1⅜ | — | |
| 6400 | Prockter United (lead, antim.) | 1 | — | |
| 7000 | Reeth Consolidated, Towednack | 4⅜ | — | |
| 10000 | Respryn (copper), Lostwithiel | 2 | — | |
| 2500 | Rhoswydol & Bacheiddon (lead) | 11¼ | — | |
| 10000 | Rinsey United | 1 | — | |
| 5000 | Rocks and Treverbyn (tin) | £5 16 | — | |
| 25200 | Rorrington (lead), Snailbeach | 6s. | ¼ | |
| 256 | Rosewarne (cop., tin), Gwinear | 24 | 66 | |
| 5000 | Round Hill, Salop | £1 2 | 13 | |
| 5250 | Silver Brook, Devon | 1¼ | ¾ | |
| 4000 | Sithney Wheal Buller (tin) | 1⅜ | 1¾ | |
| 1500 | Skiddaw & Blencathera, Keswick | 11s. | — | |
| 12000 | Sortridge Consols | 1s. | 4¼ | 4¼ 4⅜ |
| 6000 | South Bog (lead), Salop | 14s. 6d | ⅛ | ⅜ ⅜ |
| 2000 | South Carn Brea (cop.), Illogan | 13 | 6 | 5 7 |
| 256 | South Charlotte, St. Agnes | 3 | 1 | |
| 20000 | South Cork (silver, copper) | 1 | ⅛ | |
| 5000 | South Crenver (copper) | £3 13 | 2¾ | |
| 4196 | South Friendship Wheal Ann | 2⅜ | — | |
| 2000 | South of Scotland | 2⅜ | — | |
| 3500 | South Speed, Uny Lelant | 3 | — | |
| 2048 | South Wales Consols | £2 8 4 | 1 | |
| 1105 | South Wh. Crofty (cop.), Illogan | nil. | 5 | |
| 4096 | South Wheal Yeoland | ¾ | ⅜ | |
| 280 | Spearne Moor (copper), St. Just | 14 | — | |
| 5208 | St. Austell Consols | £1 18 | ⅜ | 1¼ |
| 20000 | St. Day United (tin & copper) | 2 | 1⅛ | |
| 512 | St. Michael Penkevil (tin) | 4 | — | |
| 999 | St. Minver Consols (silver-lead) | 1 | — | |
| 1800 | Swanpool, Budock | 7 | — | |
| 20000 | Tassan (lead), Ireland | 13s | ⅜ | ⅛ ⅜ |
| 4944 | Tavy Con. (cop.), near Tavistock | £2 6 | 1 | |
| 6400 | Tees Side (lead), Cumberland | 1⅛ | 1⅛ | |
| 6000 | Thomas's United | 2 | 1¾ | |
| 1000 | Tokenbury Con. (cop.), St. Ives | 4¼ | — | |
| 1024 | Trannack and Bosence, St. Erth | 7⅜ | — | |
| 12000 | Trannack Consols | 1 | 1 | 1 |
| 1024 | Trebarvah, Perranuthnoe | 3⅛ | 1 | |
| 25000 | Treburget Consols | 1 | 1 | |
| 4096 | Treburget United (lead) St. Teath | £1 19 | ⅛ | |
| 600 | Tregardock (lead), St. Teath | 6⅛ | — | |
| 4096 | Trebell Con. (tin, cop.), Lanivet | £1 5 6 | ⅛ | |
| 10000 | Treloggan, St. Colomb Minor | 1¼ | 2 | |
| 5000 | Treloweth (copper), St. Erth | £1 19 | — | |
| 8900 | Trenault (lime, copper) | 1 | — | |
| 3100 | Ditto Preference | 1 | ⅜ | |
| 2000 | Trenow Consols | £2 18 6 | 3 | |
| 10000 | Trevalga (slate), Boscastle | 1 | — | |
| 2048 | Trevelyan (tin, copper) | 5⅛ | 1¾ | |
| 2500 | Trevenen (tin), Wendron | 3⅜ | 3¾ | |
| 5120 | Treworlis and Trenethick (tin) | ⅜ | ⅜ | |
| 3200 | Ty-Maen, Whitford | ⅜ | — | |
| 4000 | Tyn-y-Worglod (slate), Carnar. | 4⅜ | 4⅛ | |
| 10000 | Tyn-y-berth (slate) | 1⅜ | 1⅜ | 1⅜ |
| 5000 | Ulpha United Mines, Cumberl. | ⅛ | — | |
| 6000 | Union (tin), Roche & Luxillion | £1 3 | 1⅛ | |
| 20000 | Vale of Towy (lead) | ¼ | ⅜ | |
| 2000 | Welsh Potosi (new shares) | ⅛ | — | |
| 256 | Wendron Consols | £32 15 5 | 50 | |
| 2000 | West Abertfwyd, Cardiganshire | 4s. | — | |
| 1024 | West Abraham (cop.), Crowan | ⅛ | — | |
| 1024 | West Alfred (cop.), Phillack | 22 | 24 | |
| 2860 | West Crinnis, St. Austell | 2¾ | 3⅛ | |
| 1024 | West Ding-Dong (tin), Sancreed | £4 13 | 2 | |
| 6400 | West Fowey Con. (tin, cop.) | £6 0 8 | — | |
| 25000 | West Par Con. (cop.), St. Blazey | 1 | 1 | |
| 6000 | West Polberro | ¾ | 1⅜ | |
| 1056 | West Stray Park | 2 | 5¾ | 8 |
| 120 | West Trethellan, Gwennap | 17 | — | |
| 6000 | West Wh. Buller (tin), St. Just | 1 | — | |
| 512 | West Wheal Frances, Illogan | 20 | 22 | 18 |
| 10000 | West Wheal Jane | 1¼ | — | |
| 4000 | West Wheal Russell, Calstock | 1⅛ | — | |
| 500 | West Wheal Towan (cop., tin.) | 32⅛ | — | |
| 1000 | Wheal Agar (copper), Illogan | 6 | — | |
| 12000 | Wheal Alfred (cop.), Hayle | 1 | 1½ | |
| 240 | Wheal Bal (tin), St. Just | 6⅛ | — | |
| 539 | Wheal Carne (tin), St. Just | 9⅜ | — | |
| 1024 | Wheal Carpenter (tin), Gwinear | £4 12 | — | |
| 1024 | Wheal Carpenter, S. Sydenham | 8⅛ | 2 | |
| 2048 | Wheal Charlotte, Perranuthnoe | £1 16 7 | 6⅜ | 7 |
| 512 | Wheal Constance (lead), Newlyn | 11 | — | |
| 4096 | Wheal Crebor (cop.), Tavistock | 3⅛ | 2⅛ | 2 2¼ |
| 1024 | Wheal Cupid (copper), Gwennap | £3 9 6 | 4 | |
| 1070 | Wheal Enys (tin), Wendron | £6 18 8 | — | |
| 720 | Wheal Franco, near Tavistock | 20⅛ | 5 | |
| 30000 | Wheal Friendship, St. Hilary | 1 | 2 | 1¾ 2 |
| 6000 | Wheal George, St. Columb | 1 | ⅛ | |
| 6000 | Wheal Grenville, Camborne | 3⅛ | ⅛ | |
| 10000 | Wheal Guskus (tin, copper) | £1 2 | ⅜ | |
| 5120 | Wheal Harriett, Camborne | 1⅛ | 1 | |
| 3000 | Wheal Helen (tin), Breage | 1⅜ | 3 | |
| 16 | Wheal Hope | 100 | — | |
| 256 | Wheal Kitty (tin), Uny Lelant | £5 8 6 | — | |
| 5000 | Wheal Kitty (tin), St. Agnes | 3¾ | 1⅜ | |
| 6000 | Wheal Langford | £1 6 6 | ¾ | |
| 512 | Wheal Margery (tin), St. Ives | 6⅛ | — | |
| 512 | Wheal Mary Ann (Perran) | 2 | 8⅛ | |
| 3400 | Wh. Mary Great Consols (cop.) | 5 | 4⅛ | |
| 5000 | Wheal Marshall, St. Stephens | ¾ | — | |
| 512 | Wheal Montague (tin) | 6¾ | — | |
| 808 | Wheal Oak (tin), near Helston | 2¼ | — | |
| 256 | Wheal Prudence (cop.), St. Agnes | 4⅜ | — | |
| 4000 | Wh. Robert, Sampford Spiney | £1 5 6 | — | |
| 2048 | Wheal Robins (tin) Liskeard | £2 17 | — | |
| 4000 | Wheal Russell (cop.), Tavistock | 2⅛ | — | |
| 1024 | Wheal Sidney, Plympton | 3⅜ | — | |
| 952 | Wheal Stanley, St. Columb | ⅛ | — | |
| 6000 | Wheal Tehidy (copper), Illogan | 2⅛ | 1¾ | 1¾ 2 |
| 512 | Wheal Trefusis (cop.), Gwennap | 19¾ | 6 | |
| 3000 | Wheal Trevena (tin), Breage | 5 | 5⅛ | |
| 8448 | Wheal Trewane (silver-lead) | 1¼ | — | |
| 1068 | Wheal Tryphena, Camborne | 10⅛ | — | |
| 3167 | Wheal Unity (cop., tin), Gwinear | £6 9 8 | 2 | |
| 1024 | Wheal Uny (tin, cop.), Redruth | 18¾ | 8 | |
| 1024 | Wheal Venton (sil.-lead), Lisk. | £6 13 | 4 | |
| 6400 | Wheal Whitleigh | 2 | — | |
| 4000 | Wheal Williams (copper) | 2⅛ | — | |
| 4096 | Wheal Wrey (lead), St. Ive | £1 9 0 | 4¼ | |
| 4096 | Wheal Zion (cop., lead), Calstock | 3⅜ | 1¼ | |
| 6400 | Whitford (lead), Flint | 5s | — | |
| 4096 | Wood (lead), Beerferris | ⅜ | 1¼ | |
| 100 | Wyndham Consols | 44 | 44 | |
| 4906 | Yeoland Consols (tin, copper) | 4¾ | 3 | |

## MINES NOT HAVING SOLD ORES.

| Shares. | | Paid. | Price. |
|---|---|---|---|
| 20000 | Angarrack Consols | 1 | 1⅛ |
| 10000 | Arundell Copper | 1⅜ | — |
| 12000 | Bannow, Wexford | 1s. | — |
| 1800 | Blaen Caylen (lead) | £1 1 6 | — |
| 5000 | Bodewl, S. Wales | £1 7 | ⅛ |
| 6000 | Bolenowe | 1⅜ | 4 |
| 1180 | Bridford Consols | £5 9 | 5¾ |
| 812 | Butterdon (lead) | 5⅛ | 3⅛ |
| 5000 | Callington Valley Con. | 1 | 1 |
| 6000 | Caradon Wood (lead) | £1 4 6 | — |
| 30000 | Carbery West, Ireland | ⅛ | ⅛ |
| 6400 | Carvath United | 2 | — |
| 10000 | Caton (silver-lead) | 3s. | ¼ |
| 4422 | Cefn Gwyn, Cardigan | £1 13 6 | ⅛ |
| 1248 | Christow (sil.-lead) | 4⅛ | — |
| 1000 | Collacombe | 10 | — |
| 5000 | Combmartin Consols | 8s. 6d. | — |
| 5000 | Coniston United | 12s. | ⅛ |
| 8000 | Cuddra (copper) | 1 | — |
| 2400 | Cwm Consols (tin) | 1¼ | 5 |
| 6000 | Cwm Eigia, Carnar. | 1 | 1 |
| 12000 | Ditto | ¼ | ¼ |
| 60000 | Cwmheisian (gold) | 1s. | ⅜ |
| 5000 | Devon Central (cop.) | 1 | 1⅛ |
| 5000 | Devon United | 1 | ⅛ |
| 8000 | Dinas Great Consols | ⅜ | ⅜ |
| 30000 | Drewsteignton | ½ | ¾ |
| 10000 | Dunsley Wh. Phœnix | 1 | 3 |
| 30000 | East Annagh (lead) | ½ | ¼ |
| 5000 | East Black Craig | 12s. 6d. | — |
| 1024 | E. Boscean, St. Just | 2 | 3 |
| 6144 | East Caradon (cop.) | 1⅛ | 2¼ |
| 5500 | East Frongoch (lead) | ⅜ | 1⅜ |
| 1000 | East Wheal Reeth | £3 9 | — |
| 4096 | Exmoor Eliza (cop.) | £2 14 0 | ⅛ |
| 5000 | Fursdon Manor | 1 | 1¾ |
| 10000 | Glansevin | 4s. | — |
| 24000 | Glenaulin & Carivilleen | ⅛ | ⅛ |
| 20000 | Glen Lead, Ireland | ⅜ | ¼ |
| 30000 | Great Cambrian | 1 | 1 |
| 10000 | Gt. Duke of Wel. Con. | 1 | 1½ |
| 512 | Great Rough Tor | 37 | 5 |
| 10000 | Great Treburget | ¼ | — |
| 10000 | Havon & Henflwch | ⅜ | ⅛ |
| 4096 | Hemerdon Consols | ¾ | ⅜ |
| 5000 | Herodscoomb | 1¼ | ¾ |
| 30000 | Irish Consols | 1 | 4s |
| 1024 | Ivy Tor Consols | £1 18 6 | 3¼ |
| 8000 | Kerry (lead) | 1 | 1 |
| 20000 | Kilraine, Donegal | 3s. | ⅜ |
| 30000 | Knockatrellane, Irel. | 1 | ¼ |
| 12000 | Lady Grenville | 1 | ⅜ |
| 20000 | Leighcloon | ⅛ | ⅛ |
| 9679 | Mount's Bay Consols | 2¼ | — |
| 320 | Nent Force, Alston | 1 | 1¾ |
| 5000 | New Copper Bottom | 1¼ | — |
| 3072 | Newton St. Cyres | 1 | — |
| 1024 | New Wh. Friendsh. | nil. | 5 |
| 256 | North Crenver (cop.) | 15 | — |
| 256 | North Fowey (cop.) | 4¾ | — |
| 6400 | North Hingston Cons. | 1s. | ⅜ |
| 150000 | North of Ireland | 1 | — |
| 128 | Oakeley (cop., gold) | 1 | 35 |
| 8000 | Oola, Limerick | 1 | 1 |
| 5000 | Pendeen Consols | ¾ | 1 |
| 4000 | Penpompren, Wales | ⅛ | — |
| 7484 | Penquean, St. Breock | 2¼ | — |
| 6000 | Perran (silver-lead) | ⅛ | ¼ |
| 12000 | Perran Wh. Alfred | 1 | ¾ |
| 4000 | Perran Wheal Jane | £1 3 | — |
| 10000 | Polgooth & Woodclose | 1⅛ | — |
| 2048 | Ponterwyd, Cardigan | 2¾ | — |
| 9259 | Perran Consols | 2 | 1 |
| 10000 | Quintrell Downs | ⅜ | ⅛ |
| 8000 | Red Dragon, Wales | 1 | 1⅜ |
| 240 | Retallack United | 1 | 1⅛ |
| 10000 | Rheidol United Mine | £1 2 | ⅜ |
| 4000 | Ritton Castle (lead) | ¾ | 1 |
| 60000 | Royal Hibernian | 1 | ¼ |
| 21000 | South Devon Consols | 1 | |
| 10000 | South Herodsfoot | 1 | |
| 240 | South Trelawny | 1⅛ | |
| 3072 | South-West Phœnix | £1 13 6 | |
| 1024 | South Wheal Alfred | ⅛ | |
| 1000 | South Wheal Lovel | 13s. 6d. | |
| 4000 | South Wheal Russell | 11s. 6d. | |
| 10000 | Taliesin, Cardigansh. | 2¾ | |
| 10000 | Tamar Maria | ⅜ | |
| 1800 | Teign Hope (Dart.) | 1 | |
| 12000 | Tregoneb. & Fatwork | 1 | |
| 4000 | Tremollett Down | ⅜ | |
| 4000 | Tresellyn Consols | 12s | |
| 2048 | West Goginan, Card. | 4¾ | |
| 1024 | West Phœnix | 15⅜ | |
| 256 | West Sharp Tor | 47 | 210 |
| 12000 | West Sortridge | 3s. | |
| 5000 | West Wheal Arthur | ⅛ | |
| 6000 | W. Wh. Friendship. | 1 | |
| 5000 | Wheal Eckley | £1 2 | |
| 4096 | Wheal Edward | 2 | |
| 5000 | Wheal Fanny | £1 18 | |
| 2048 | Wh. Fanny, Perran. | £1 12 | |
| 4000 | Wh. Fort. (S. Taw.) | £1 5 6 | |
| 512 | Wheal Freedom | 1 | |
| 1536 | Wheal Gill | 10 | |
| 4800 | Wheal Ludcott | 15s. | |
| 8000 | Wheal Penelope | 1 | |
| 8960 | Wheal Peru, Cornw. | 10s. 6d. | |
| 6000 | Wheal Pollard | 6s. 8d. | |
| 6400 | Wheal Prosper | ¼ | |
| 10000 | Wheal Samson | 1 | |
| 4000 | Wheal Surprise | 1 | |
| 1024 | Wheal Trelusback | 6⅜ | |
| 3000 | Wheal Tristrem | 3 | |
| 4000 | Wheal Victoria | 1⅜ | |
| 5000 | Willow Bank (lead) | 11s. | |
| 800 | Winster (lead) | 1 | |
| 64 | Yeo, Chagford, Dev. | 5 | |
| 10000 | Yorkshire Min. Co. | ⅛ | |

⁂ In accordance with an announcement to that effect, we have removed the prices from all mines in the above list where rations have not been forwarded, or the price given confirmed, for a period of one month: we hope by that means to re one difficulty,—that of purchasers or sellers being deceived by the quotation in the current Journal being represented a present value, although the price may have varied considerably since it first appeared. We hope, also, to bring the partie cerned into more frequent communication with regard to any alteration in the present position or prospects of their respe adventures; and, we need hardly add, that we shall be happy to fill up all the blanks, on receipt of the quotation at whic siness has actually been transacted, guaranteed by the name and address of our correspondent.

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